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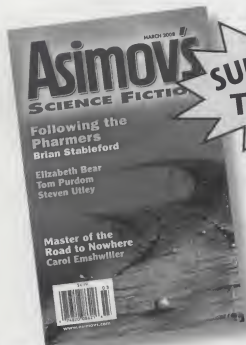
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JUNE 2010

Vol. 34 No. 6 (Whole Number 413)

Next Issue on Sale May 11, 2010

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Asimov's Science Fiction. ISSN 1065-2698. Vol. 34, No. 6. Whole Nos. 413, June 2010. GST #R123293128. Published monthly except for two combined double issues in April/May and October/November by Dell Magazines, a division of Crossstown Publications. One year subscription \$55.90 in the United States and U.S. possessions. In all other countries \$65.90 (GST included in Canada), payable in advance in U.S. funds. Address for subscription and all other correspondence about them, 6 Prowitt Street, Norwalk, CT 06855. Allow 6 to 8 weeks for change of address. Address for all editorial matters: *Asimov's Science Fiction*, 267 Broadway, 4th Floor, New York, N.Y. 10007. *Asimov's Science Fiction* is the registered trademark of Dell Magazines, a division of Crossstown Publications. © 2010 by Dell Magazines, a division of Crossstown Publications, 6 Prowitt Street, Norwalk, CT 06855. All rights reserved, printed in the U.S.A. Protection secured under the Universal and Pan American Copyright Conventions. Reproduction or use of editorial or pictorial content in any manner without express permission is prohibited. All submissions must include a self-addressed, stamped envelope; the publisher assumes no responsibility for unsolicited manuscripts. Periodical postage paid at Norwalk, CT and additional mailing offices. POSTMASTER, send change of address to *Asimov's Science Fiction*, 6 Prowitt Street, Norwalk, CT 06855. In Canada return to Worldcolor St. Jean, 800 Blvd. Industriel, St. Jean, Quebec J3B 8G4.

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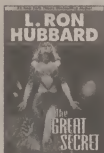
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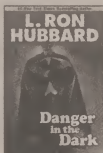
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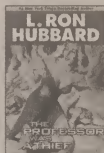
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DO ANDROIDS DREAM OF ELECTRIC ZHU ZHU PETS?

As someone who buys quite a few stories and rejects a whole lot more, I've been accused of practically every bias imaginable. Most of these accusations are mutually contradictory and they often tell me more about what's irking the letter writer or the blogger than they do about what's actually appearing on the pages of *Asimov's*. The strangest claim of all, though, came from a man who edgily maintained I had a preference for stories with *cats*.

Well, I know it's ill advised to respond to critics, but I really spluttered over that one. I will confess that I grew up in a household surrounded by pets. It seemed that we always had two dogs, two cats, two turtles, and at least two rodents of some sort. I loved most of those pets, but, since we were fairly typical children, we left all the cleaning and feeding and trips to the vet to our mother. She did all the work even if, ostensibly, the turtles belonged to my sister Judi, the mice and gerbils were my sister Tory's, one dog belonged to my sister Lynn, and the other had been a gift to me on my fourteenth birthday. While my mother swore she'd draw the line at playing nursemaid to an old animal, she cared for all those pets tirelessly. In the end, my old dog outlived her by several years.

I did not find myself in a situation where I could care for an animal until long after I'd left home. When we purchased our co-op, my husband and I made sure that the building allowed dogs, but I didn't really think about a pet until my first child began begging for a cat. Her father could not deny his three-year-old much of anything, so, on Christmas Eve, Santa rescued a cat from certain annihilation at the Center for Animal Control. Alas, though the cat turned out to be an expert mouser it was

not child friendly. Without small animals to hunt, it took to stalking our daughter. Darting like a flying squirrel, it would swoop out of nowhere to pounce on her tiny feet. When she began to carry a pillow in front of her for protection, we realized something had to change. Eventually, the cat moved into the home of a childless friend of ours and has lived there happily ever after.

Our younger daughter has been begging for a dog for several years now. She's always loved them, and she formed an especially deep attachment to Connie Willis's bulldog Smudge when we visited Connie and her family a couple of years ago. I sympathize with my daughter, but I'm not currently prepared to assume the role of family gamekeeper. Besides, she doesn't help her case by planning out the outfits she's going to dress her dog up in.

Sometimes, I think the solution is to look to the artificial pets predicted so presciently by Philip K. Dick. I try to tell my seven-year-old that if a Tekno Dog was good enough for your sister, a Zhu Zhu Pet will have to satisfy you. Electronic pets may not be perfect—the Neo Pets and the Littlest Pet Shop Online tend to crash my computer, while the Tamagotchi and the Neo Pets are nearly as much work as the real thing. They may not even save me from my mother's fate—I finally banned the Neo Pets when I realized that I was going online once a day to keep my older daughter's neglected virtual pets "alive." Still, there is something endearing about a chittering, beeping hamster that doesn't require any sawdust. I won't even object if my little one decides to dress it up in haute couture. Yet, even I will admit that a person tends to find more emotional comfort petting a kitten than they do petting a Furby.

There are a lot of famous science fiction editors who co-exist with pets. Stanley Schmidt, the editor of *Analog*, usually has a pet snake; Ellen Datlow, the well-known anthologist and former fiction editor of *Omni* and *Sci Fiction*, has always owned a couple of lovely kitties; my predecessor, Gardner Dozois, and his wife Susan Casper are also partial to felines. One of their cats was even named for the title character in the classic story, "The Ballad of Lost C'Mell." None of these editors' feelings for their pets seems to have clouded their judgement when it comes to buying great stories.

And my reluctance to commit to a living animal doesn't mean I don't enjoy stories about the real thing. I've read a lot of fine cat stories by authors like Cordwainer Smith, Fritz Leiber, Jack Skillingstead, and Andre Norton. From Connie Willis and Clifford Simak to Nancy Kress, Kathleen Ann Goonan, and Robert Reed have come lots of great stories that feature dogs. At *Asimov's*, we've run a fair amount of stories about monkeys and birds, too. I've loved so many of these stories. I can remember the first time I read "Desertion" and "All Cats Are Gray." I nearly cried over "The Last of the Winnebagos," and I was utterly charmed by "Space-Time for Springers" and "26 Monkeys, Also the Abyss." Putting a cat or a dog or even a mouse into a story isn't going to seal the deal on a sale to the magazine, but sending in a story that affects me as deeply as "Flowers for Algernon" certainly will.

Even if we don't keep pets, animals are a part of our lives. It's no surprise that they find their way into science fiction stories. I have a bias for good stories, and some of those stories will include cats. On the other hand, I haven't yet decided whether to break down and finally get that puppy or to tell my poor kids that Cordwainer Smith's underpeople will undoubtedly be uplifted sooner than they'll convince Santa to bring them their next living creature. ○

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SATAN, GET THEE HENCE!

A few years ago a small town in Florida declared itself a Satan-free zone, and the idea has stuck in my mind ever since. It's a fascinating notion: dealing with the evils of the world by legislative fiat. Out here in California, it's quite a standard thing for city councils and other minor municipal bodies to issue resonant decrees calling for an end to this or that troublesome contemporary activity—whether it be planetary warming, gum-chewing in school, noisy car stereos played in quiet neighborhoods, or the sale of irradiated lettuce in grocery stores, some community around here has gone on record staunchly decrying it. But decrying is one thing and an outright ban by law is something else again. I think we ought to give more thought to the practice.

The town in Florida is about seventy-five miles north of Tampa, a placid sort of place on the banks of the beautiful Withlacoochee River where some sixteen hundred pleasant and mostly law-abiding people enjoy the mild Gulf Coast climate and a general freedom from the spiritual angst that afflicts harried city-dwellers. But even in this amiable little burg the dark hand of Lucifer was making itself known. Though the Prince of Darkness had not yet manifested himself visibly, signs of his presence were becoming apparent: an uptick in crime, some arrests for child abuse and spousal abuse, and an ugly tendency on the part of the younger citizens to dress in black clothing and paint their faces a ghastly white, not just for Halloween but as a regular fashion. There were tales of increasing drug usage, too, and casual blasphemy in everyday speech. Concerned citizens felt that the town was turning into a pit of iniquity.

A local pastor was the first to take ac-

tion. "We as Christians have got to take a stand for God," he said, "and reclaim our town for God." And so he had hollowed-out wooden posts installed at each of the town's four entrances, with the intention of inserting a prayer into them that would serve to keep the Dark One at bay. But the mayor felt that some more emphatic statement needed to be made, and on the very evening—Halloween—when malevolent spirits are thought to be most active, she drew up an official proclamation to be placed in each of the preacher's gateposts:

Be it known that from this day forward that Satan, ruler of darkness, giver of evil, destroyer of what is good and just, is not now, nor ever again will be, a part of this town . . . Satan is hereby declared powerless, no longer ruling over, nor influencing, our citizens.

In the past, Satan has caused division, animosity, hate, confusion, ungodly acts on our youth, and discord among our friends and loved ones. No longer!

The body of Jesus Christ, those citizens cleansed by the Blood of the Lamb, hereby join together to bind the forces of evil in the Holy Name of Jesus. We have taken our town back for the Kingdom of God. We are taking everything back that the devil ever stole from us. We will never again be deceived by satanic and demonic forces.

As blood-bought children of God we exercise our authority over the devil in Jesus's name. By that authority, and through His Blessed Name, we command all Satanic and demonic forces to cease their activities and depart. . . .

Strong stuff, especially the parts about the body of Jesus and the Blood of the Lamb (and the references to the Gospels that I omit here), but very nicely phrased, I think, except for one wobbly preposition, the bit about Satan's causing "ungodly acts on our youth." And the measure, duly signed by the town clerk and stamped with the official seal, was widely applauded in town. "I think the law-abiding citizens have banded together and drawn some strength from what the mayor has done," a police lieutenant said. But would it have much effect on demonic activities in town? The first results were not encouraging: not long after the proclamations were placed within the posts, some minion of darkness stole all four of them. New posts were constructed and installed. The youth of the town continued, however, to dress in vile Gothic garb. No measurable decrease in crime could be detected. And waggish miscreants began calling the mayor's office. "Carolyn?" they would say. "This is Satan. I know you want me, baby."

Some political issues also cropped up. Doubtless few people in that rural area would openly stand forth and serve as advocates for Old Nick, but some, at least, were a bit troubled by the use of Jesus's name in a municipal proclamation. "One person's beliefs are fine, but not on the town letterhead," a citizen commented. Another noted that in a part of the proclamation not quoted here the mayor declared she had not only been elected by the citizens but "appointed by God to this position of leadership." To some, that appeared an overstatement, at the very minimum. A professor of political science at the University of Miami remarked that although the measure "would seem like something everyone would agree on, it also seems aggressive and threatening to others who don't specifically abide by that belief." Another academic, an expert on constitutional law, thought the proclamation "would open up the town to accusations of a preference of religions." The American Civil Liberties Union also began to won-

der whether issues of separation of church and state might be involved, and threatened legal action.

The story spread across our land, and, since not all Americans believe that mayors are appointed by God or that the Holy Name of Jesus should be an instrument of municipal regulation, the little Floridian town became the butt of some unpleasant jokes. Hastily the town commission ruled that the mayor had acted alone and that the proclamation had no official standing, and the good people of that amiable little town were once again left to fend for themselves against the Devil's wiles.

I happen not to be a blood-bought child of God myself—I come from a different tribe—and so I don't think my own community (a pleasant little burg on the edge of San Francisco Bay, where, Lord knows, the Devil is at work 24/7, minimum) would benefit from such a proclamation. Nor am I very impressed by the neighboring city of Berkeley's decision to proclaim itself a nuclear-free zone, since, last time I was there, Berkeley was full of electrons and protons and a lot of other bad atomic stuff. But some of these proclamations do work. As a non-smoker, I approve of the stern anti-smoking laws that keep the air pure in the restaurants I frequent, even those in Paris and London. I like the idea that driving through red lights is illegal in most municipalities in my area. And how can I not cheer Alexander Kuzmin, the mayor of Megion in western Siberia, who forbade the making of excuses by civil employees? The good mayor has released a list of twenty-seven forbidden phrases, among them, "Somebody else has the documents," "I think I was off sick at the time," and "We're having lunch." I don't know what the punishment for violating the rules would be—exile to Siberia wouldn't be of much use, after all—but I hope it's merciless.

If I had my druthers, I might be tempted to issue a proclamation of my own, declaring my house a tax-free zone. But that might lead the city fathers to reciprocate by making my street a police-free zone,

too, and the federal government might want to make it a postal-delivery-free zone, and I see other drawbacks, too. So I go on paying taxes like everyone else, though taking little joy in the process. I doubt that declaring my city or, for that matter, my entire state to be a stupidity-free zone would work out very well either.

There are limits, after all, to what can be achieved by official decree, as the mayor of that little town in Florida might have begun to suspect when Lucifer's lieutenants made off with the posts containing her proclamation. I give you the example of King Canute of England (and Denmark), one of the most sensible rulers in history, whose best-known deed, as often is the case with the deeds of sensible rulers, has been so distorted and muddled in the retelling that he is made to seem like a silly old fool instead of the wise monarch he really was.

Canute, who ruled over England from 1015 to 1035, was a fierce, rough Viking, but he was also a pious man who had turned away from the old religion of Odin and Thor to abide by the teachings of Jesus, and—so says the twelfth-century chronicler Henry of Huntingdon—he became peeved by courtiers who were flattering him by ascribing godlike powers to him. So, Henry says, Canute had his throne set up by the edge of the sea (either in West Sussex or Southampton, or perhaps it was not the sea but the Thames, right in the middle of London; accounts differ) and commanded the oncoming tide to halt.

Of course the tide *didn't* halt, and the king was forced to jump back from the shore to keep his royal feet and robes from getting soaked. Modern tellers of the tale want us to believe that this shows that Canute was just an arrogant dope, his head swollen with monarchical pride. But in fact Canute was smarter than that, and what he was demonstrating was humility, not *hubris*. For as he leaped back from the unheeding waves he said, according to the chronicler, "Let all men know by this how empty and worthless is the power of kings, for there is none worthy of the name, but He whom heaven, earth, and sea obey by eternal laws." Then he hung his golden crown on a crucifix, and never wore it again.

Today's kings, queens, prime ministers, and presidents, by and large, are just as aware as King Canute was that they don't have the power to roll back the tides, and a good thing that is, too, for we can just imagine what malicious fun Queen Elizabeth II and President Sarkozy would have rolling the English Channel back and forth from shore to shore if only they could. (On the other hand, California's Arnold Schwarzenegger would, I like to think, be able to protect us here against a tsunami of the sort that hit Asian coasts a few years ago.) But indeed such wonders can't be achieved. And I suspect that even if the Florida experiment had been allowed to run a little longer, it would have turned out equally difficult to run Satan out of town by mayoral proclamation. ○

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THE PRICE OF FREE (Part Two)

deflation

In part one of this two-part column, we looked at the controversial book **Free: The Future of A Radical Price** <amazon.com/Free-Future-Radical-Chris-Anderson/dp/1401322905> by **Chris Anderson** <thelongtail.com>. Anderson's thesis is that as certain industries become digital and migrate to the net, some, if not all, of their products tend toward a price of zero. This is in part because the web is the world's largest and most sophisticated copy machine. Reproducing information like movies, songs, and columns about the internet is what it does superlatively well. Before the net, there were two costs to making money from such information: the cost of creating it and the cost of producing and disseminating it. Now, thanks to our shiny digital distribution network, the marginal costs of production and dissemination seem to have shrunk to practically nothing. Anderson argues that the downward pressure on price is unstoppable. "Free is just a matter of when, not if," he writes. But he believes that it is still possible to make money from free products, by redefining the markets, and he offers an extensive list of ways it is being accomplished at this very moment. "When one product or service becomes free, value migrates to the next higher layer," he claims. "Go there."

But it is not only the marginal costs that have undergone radical deflation. As we discussed last time, people are volunteering their labor to create information on the net as well. They do this for many reasons, but chief among them is, I think, the thrill of being creative

and useful and of sharing their enthusiasms with the world. Much of the free content on the web has been created by amateurs. Understand that they are often as gifted and insightful as professionals. Nevertheless, in the sense that they are not paid, they are amateurs.

reaction

Critics, and there have been many, have chided Anderson for his sunny take on the disruption caused by the radical deflation served up by the net. "Free is a successful business speech between two covers, pleasant, upbeat and full of anecdotes and bullet points," says the *New York Times* <nytimes.com/2009/07/12/books/review/Postrel-t.html?_r=1&pagewanted=all>. But Anderson does not follow his ideas to their logical conclusion. "After all, the last thing a business author wants to suggest is that we're entering a new age of amateurism. But there are hints throughout the book that the future of this radical price is to be found in the past, when satisfying work was what one did on the income provided by less satisfying toil, or by investments, patronage, or marriage."

Malcolm Gladwell <gladwell.com>, author of *The Tipping Point* and *Outliers*, rips into Anderson's premises in a review in *The New Yorker* <newyorker.com/arts/critics/books/2009/07/06/090706crbo_books_gladwell>. Anderson points to **YouTube** <youtube.com> as an example of how giving content away can be successful. Gladwell calls him out on this claim: the stupendous popularity of YouTube has meant that its bandwidth costs are also, well, *stupendous*. Accord-

ing to one estimate, YouTube will lose half a billion dollars in 2009. In a memorable line, Gladwell derides YouTube's alleged success, "If it were a bank, it would be eligible for TARP funds."

Cory Doctorow <craphound.com> reviewing in **The Guardian** <guardian.co.uk/technology/blog/2009/jul/28/cory-doctorow-free-chris-anderson> is more sympathetic than some but argues that observing the rise of free culture through the lens of markets distorts Anderson's view. "There's a pretty strong case to be made that 'free' has some inherent antipathy to capitalism. That is, information that can be freely reproduced at no marginal cost may not want, need, or benefit from markets as a way of organizing them." The content created by the legions of netizens who volunteer their labor is not free in the sense that Anderson intends. "The material," Doctorow writes, "is, instead, literally priceless. It represents a large and increasing segment of our public life that is conducted entirely for reasons outside the marketplace."

While many of the critics of Anderson's theses are spot on, it would be foolish to ignore this book. When he asserts that free is here to stay, I believe him. Those who object to the deflation of prices for content on the web, those who hope we can hold onto fifteen-dollar CDs and thirty-dollar hardcover books and newspapers you can line birdcages with, just don't get it. The biggest problem with *Free*, it seems to me, is its subtitle: *The Future of a Radical Price*. The book is not the map to the future that we all covet. Rather, it is a blurry snapshot of the current digital landscape. Net culture and technology are demonetizing entire industries, that's clear. The question is, how will we re-monetize their successor industries? While he offers suggestions, Anderson doesn't really have the answers.

Because nobody does.

reputation

What is it worth to pop to the top of a Google search? How about to appear on

the first page? The first three pages? If you were to opine that page rank is worthless in real dollars, then how do you account for all the search engine optimization services out there that will charge you \$50, \$80, or even \$120 a month to boost it? Why did creativity software giant **Adobe Systems** <adobe.com> buy the web analytics company **Omniure** <omniure.com> last September for \$1.8 billion?

An important tool in Anderson's strategy for surviving in the net's zero price economy is converting credit in the attention and reputation economies into dollars. While there is a heated debate about the nature of these economies, there are some rough tools for assessing a website's status in them. Alas, the art of **web analytics** <en.wikipedia.org/wiki/Web_analytics> is largely beyond me. It is no doubt too simple to say that the attention a site receives can be measured by how many people visit it and how long they stay, while the reputation of a site can be measured by how many other sites link to it. But these definitions are tempting, since they're easy to quantify. Those who track markets love numbers, even if they are misleading. And if you can convince an advertiser that your numbers mean that enough of her customers will read her message on your site, then you may be able to charge her for an ad.

But the reputation economy can also pay off indirectly. Give away an abundance of content, attract an audience and build your "brand." (My inner English major shudders whenever I use this word. Did **Franz Kafka** <kafka.org> build his brand? Does **Thomas Pynchon** <thomaspynchon.com> **ego surf** <addictomatic.com> ?) Once you have established your rep, you can storm out into the world and sell yourself as an added value. We've all heard **Stewart Brand**'s <web.me.com/stewartbrand> famous saying "Information wants to be free." But did you know that it was part of a **longer quote** <web.me.com/stewartbrand/SB_homepage/Info_free_story.html>?

"On the one hand information wants to be expensive, because it's so valuable. The right information in the right place just changes your life. On the other hand, information wants to be free, because the cost of getting it out is getting lower and lower all the time. So you have these two fighting against each other."

The ninth of Anderson's *Ten Rules of Free* is "Free Makes Other Things More Valuable." If you have given away an abundance of content and through that exposure have established a reputation, one kind of expensive information you have to offer is that which you can only impart in person. Thus the apostles of Free preach that rock bands can give their music away on the net and earn their livings at concerts.

Well, maybe. But exactly how is this supposed to work for symphony orchestras? And how many midlist SF writers are besieged by lucrative offers to read their work in football stadiums or to give lecture series on the speculative short story at Harvard? We freelancers have a saying that goes to this point: "You can die of exposure."

By the way, if you'd like to invite a science fiction writer to stop by your neighborhood and say interesting stuff, check out **SFWA's Speakers Bureau** <[sfwa.org/for-educators/speakers-bureau](mailto:sfwaweb@for-educators.com)>.

exit

Warning! I'm going to finish by talking about myself, as I do all too often, so feel free to skip ahead now to all the great stories in this issue.

I have to admit that I have benefited

from the reputation economy. Although I do not myself have a Master of Fine Arts, I earn a paycheck teaching at the **Stonecoast Creative Writing MFA Program** <usm.maine.edu/stonecoastmfa>. I am pretty sure that I wasn't hired because I was giving content away on the net, but rather because of the scores of stories I have written, the majority of which have appeared in *Asimov's*.

However, I do write this column and it does appear for free on the 'Mov's site. Why do I do it? As I said in the last installment, human behavior is over-determined, and my various reasons illustrate the rewards that are possible in the zero price economy. I *did* get paid for typing these words, although not handsomely so. The fact is, I could make more money doing other kinds of writing. So the financial incentive is secondary, at best. More important is that by writing this column I am earning credit in the reputation economy. When I attend SF conventions I am surprised (and a little chagrined) that, of those who recognize my name, a sizeable fraction have only a vague idea that I write stories. They know me primarily for this column. But have I been able to bank that credit? Not so far. Most important of all, though, is that I get a kick out of being your net columnist. This gig gives me a perfectly good excuse for ~~wasting time~~ exploring sites that interest me. It has helped me become a better writer. And I feel that I am doing good when I point out really deserving sites.

Sure, getting paid and earning a reputation count. But as those **Master Card** <mastercard.com> ads say,

Having fun while I write: priceless. ○

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THE EMPEROR OF MARS

Allen M. Steele

Allen M. Steele tells us that, like “The Jekyll Island Horror” (January 2010), his latest tale contains a smidgen of fact within the fiction. “The Planetary Society did, indeed, place a DVD library of science fiction aboard NASA’s Phoenix lander, which landed on Mars last year (2008). Among the stories included was my first *Asimov’s* short story, ‘Live from the Mars Hotel’ (Mid-December 1988). There’s some other *Asimov’s* stories on the disk as well—I recognize one by Greg Benford, and another by Stan Robinson*—and the list is available at the Planetary Society’s website. Look for the appropriate page at www.planetary.org/programs/projects/messages/vom_contents.html. I’m as proud of the fact that I have a story on Mars as I am of any of the awards my work has won.”

Out here, there’s a lot of ways to go crazy. Get cooped up in a passenger module not much larger than a trailer, and by the time you reach your destination you may have come to believe that the universe exists only within your own mind: it’s called solipsism syndrome, and I’ve seen it happen a couple of times. Share that same module with five or six guys who don’t get along very well, and after three months you’ll be sleeping with a knife taped to your thigh. Pull double shifts during that time, with little chance to relax, and you’ll probably suffer from depression; couple this with vitamin deficiency due to a lousy diet, and you’re a candidate for chronic fatigue syndrome.

Folks who’ve never left Earth often think that Titan Plague is the main reason people go mad in space. They’re wrong. Titan Plague may rot your brain and turn you into a homicidal maniac, but instances of it are rare, and there’s a dozen other ways to go bonzo that are much more subtle. I’ve seen guys adopt imaginary friends with whom they have long and meaningless conversations, compulsively clean their hardsuits regardless of whether or not they’ve recently worn them, or go for a routine spacewalk and have to be begged to come back into the airlock. Some people just aren’t cut out for life away from Earth, but there’s no way to predict who’s going to lose their mind.

When something like that happens, I have a set of standard procedures: ask the

*In addition to the stories Allen mentions, the DVD includes three other tales—by Brian Aldiss, Ian McDonald, and Lawrence Watt-Evans—that were first published in *Asimov’s*.—Ed.

doctor to prescribe antidepressants, keep an eye on them to make sure they don't do anything that might put themselves or others at risk, relieve them of duty if I can, and see what I can do about getting them back home as soon as possible. Sometimes I don't have to do any of this. A guy goes crazy for a little while, and then he gradually works out whatever it was that got in his head; the next time I see him, he's in the commissary, eating Cheerios like nothing ever happened. Most of the time, though, a mental breakdown is a serious matter. I think I've shipped back about one out of every twenty people because of one issue or another.

But one time, I saw someone go mad, and it was the best thing that could have happened to him. That was Jeff Halbert. Let me tell you about him . . .

Back in '48, I was General Manager of Arsia Station, the first and largest of the Mars colonies. This was a year before the formation of the Pax Astra, about five years before the colonies declared independence. So the six major Martian settlements were still under control of one Earth-based corporation or another, with Arsia Station owned and operated by ConSpace. We had about a hundred people living there by then, the majority short-timers on short-term contracts; only a dozen or so, like myself, were permanent residents who'd left Earth for good.

Jeff wasn't one of them. Like most people, he'd come to Mars to make a lot of money in a relatively short amount of time. Six months from Earth to Mars aboard a cycleship, two years on the planet, then six more months back to Earth aboard the next ship to make the crossing during the bi-annual launch window. In three years, a young buck like him could earn enough dough to buy a house, start a business, invest in the stock market, or maybe just loaf for a good long while. In previous times, they would've worked on off-shore oil rigs, joined the merchant marine, or built powersats; by mid-century, this kind of high-risk, high-paying work was on Mars, and there was no shortage of guys willing and ready to do it.

Jeff Halbert was what we called a "Mars monkey." We had a lot of people like him at Arsia Station, and they took care of the dirty jobs that the scientists, engineers, and other specialists could not or would not handle themselves. One day they might be operating a bulldozer or a crane at a habitat construction site. The next day, they'd be unloading freight from a cargo lander that had just touched down. The day after that, they'd be cleaning out the air vents or repairing a solar array or unplugging a toilet. It wasn't romantic or particularly interesting work, but it was the sort of stuff that needed to be done in order to keep the base going, and because of that, kids like Jeff were invaluable.

And Jeff was definitely a kid. In his early twenties, wiry and almost too tall to wear a hardsuit, he looked like he'd started shaving only the week before. Before he dropped out of school to get a job with ConSpace, I don't think he'd travelled more than a few hundred miles from the small town in New Hampshire where he'd grown up. I didn't know him well, but I knew his type: restless, looking for adventure, hoping to score a small pile of loot so that he could do something else with the rest of his life besides hang out in a pool hall. He probably hadn't even thought much about Mars before he spotted a ConSpace recruitment ad on some website; he had two years of college, though, and met all the fitness requirements, and that was enough to get him into the training program and, eventually, a berth aboard a cycleship.

Before Jeff left Earth, he filled out and signed all the usual company paperwork. Among them was Form 36-B: Family Emergency Notification Consent. ConSpace required everyone to state whether or not they wanted to be informed of a major illness or death of a family member back home. This was something a lot of people didn't take into consideration before they went to Mars, but nonetheless it was an issue that had to be addressed. If you found out, for instance, that your father was about to die, there wasn't much you could do about it, because you'd be at least thirty-five mil-

lion miles from home. The best you could do would be to send a brief message that someone might be able to read to him before he passed away; you wouldn't be able to attend the funeral, and it would be many months, even a year or two, before you could lay roses on his grave.

Most people signed Form 36-B on the grounds that they'd rather know about something like this than be kept in the dark until they returned home. Jeff did, too, but I'd later learn that he hadn't read it first. For him, it had been just one more piece of paper that needed to be signed before he boarded the shuttle, not to be taken any more seriously than the catastrophic accident disclaimer or the form attesting that he didn't have any sort of venereal disease.

He probably wished he hadn't signed that damn form. But he did, and it cost him his sanity.

Jeff had been on Mars for only about seven months when a message was relayed from ConSpace's human resources office. I knew about it because a copy was cc'd to me. The minute I read it, I dropped what I was doing to head straight for Hab 2's second level, which was where the monkey house—that is, the dormitory for unspecialized laborers like Jeff—was located. I didn't have to ask which bunk was his; the moment I walked in, I spotted a knot of people standing around a young guy slumped on his bunk, staring in disbelief at the fax in his hands.

Until then, I didn't know, nor did anyone one at Arsia Station, that Jeff had a fiancée back home, a nice girl named Karen whom he'd met in high school and who had agreed to marry him about the same time he'd sent his application to ConSpace. Once he got the job, they decided to postpone the wedding until he returned, even if it meant having to put their plans on hold for three years. One of the reasons why Jeff decided to get a job on Mars, in fact, was to provide a nest egg for him and Karen. And they'd need it, too; about three weeks before Jeff took off, Karen informed him that she was pregnant and that he'd have a child waiting for him when he got home.

He'd kept this a secret, mainly because he knew that the company would annul his contract if it learned that he had a baby on the way. Both Jeff's family and Karen's knew all about the baby, though, and they decided to pretend that Jeff was still on Earth, just away on a long business trip. Until he returned, they'd take care of Karen.

About three months before the baby was due, the two families decided to host a baby shower. The party was to be held at the home of one of Jeff's uncles—apparently he was the only relative with a house big enough for such a get-together—and Karen was on her way there, in a car driven by Jeff's parents, when tragedy struck. Some habitual drunk who'd learned how to disable his car's high-alcohol lockout, and therefore was on the road when he shouldn't have been, plowed straight into them. The drunk walked away with no more than a sprained neck, but his victims were nowhere near so lucky. Karen, her unborn child, Jeff's mother and father—all died before they reached the hospital.

There's not a lot you can say to someone who's just lost his family that's going to mean very much. *I'm sorry* barely scratches the surface. *I understand what you're going through* is ridiculous; *I know how you feel* is insulting. And *is there anything I can do to help?* is pointless unless you have a time machine; if I did, I would have lent it to Jeff, so that he could travel back twenty-four hours to call his folks and beg them to put off picking up Karen by only fifteen or twenty minutes. But everyone said these things anyway, because there wasn't much else that *could* be said, and I relieved Jeff of further duties until he felt like he was ready to go to work again, because there was little else I could do for him. The next cycleship wasn't due to reach Mars for another seventeen months; by the time he got home, his parents and Karen would have been dead for nearly two years.

To Jeff's credit, he was back on the job within a few days. Maybe he knew that there was nothing he could do except work, or maybe he just got tired of staring at the walls. In any case, one morning he put on his suit, cycled through the airlock, and went outside to help the rest of the monkeys dig a pit for the new septic tank. But he wasn't the same easygoing kid we'd known before; no wisecracks, no goofing off, not even any gripes about the hours it took to make that damn hole and how he'd better get overtime for this. He was like a robot out there, silently digging at the sandy red ground with a shovel, until the pit was finally finished, at which point he dropped his tools and, without a word, returned to the hab, where he climbed out of his suit and went to the mess hall for some chow.

A couple of weeks went by, and there was no change. Jeff said little to anyone. He ate, worked, slept, and that was about it. When you looked into his eyes, all you saw was a distant stare. If he'd broken down in hysterics, I would've understood, but there wasn't any of that. It was as if he'd shut down his emotions, suppressing whatever he was feeling inside.

The station had a pretty good hospital by then, large enough to serve all the colonies, and Arsia General's senior psychologist had begun meeting with Jeff on a regular basis. Three days after Jeff went back to work, Karl Rosenfeld dropped by my office. His report was grim; Jeff Halbert was suffering from severe depression, to the point that he was barely responding to medication. Although he hadn't spoken of suicide, Dr. Rosenfeld had little doubt that the notion had occurred to him. And I knew that, if Jeff did decide to kill himself, all he'd have to do was wait until the next time he went outside, then shut down his suit's air supply and crack open the helmet faceplate. One deep breath, and the Martian atmosphere would do the rest; he'd be dead before anyone could reach him.

"You want my advice?" Karl asked, sitting on the other side of my desk with a glass of moonshine in hand. "Find something that'll get his mind off what happened."

"You think that hasn't occurred to me? Believe me, I've tried . . ."

"Yeah, I know. He told me. But extra work shifts aren't helping, and neither are vids or games." He was quiet for a moment. "If I thought sex would help," he added, "I'd ask a girl I know to haul him off to bed, but that would just make matters worse. His fiancée was the only woman he ever loved, and it'll probably be a long time before he sleeps with anyone again."

"So what do you want me to do?" I gave a helpless shrug. "C'mon, give me a clue here. I want to help the kid, but I'm out of ideas."

"Well . . . I looked at the duty roster, and saw that you've scheduled a survey mission for next week. Something up north, I believe."

"Uh-huh. I'm sending a team up there to see if they can locate a new water supply. Oh, and one of the engineers wants to make a side trip to look at an old NASA probe."

"So put Jeff on the mission." Karl smiled. "They're going to need a monkey or two anyway. Maybe travel will do him some good."

His suggestion was as good as any, so I pulled up the survey assignment list, deleted the name of one monkey, and inserted Jeff Halbert's instead. I figured it couldn't hurt, and I was right. And also wrong.

So Jeff was put on a two-week sortie that travelled above the 60th parallel to the Vastitas Borealis, the subarctic region that surrounds the Martian north pole. The purpose of the mission was to locate a site for a new well. Although most of Arsia Station's water came from atmospheric condensers and our greenhouses, we needed more than they could supply, which was why we drilled artesian wells in the permafrost beneath the northern tundra and pumped groundwater to surface tanks, which in turn would be picked up on a monthly basis. Every few years or so, one of

those wells would run dry; when that happened, we'd have to send a team up there to dig a new one.

Two airships made the trip, the *Sagan* and the *Collins*. Jeff Halbert was aboard the *Collins*, and according to its captain, who was also the mission leader, he did his job well. Over the course of ten days, the two dirigibles roamed the tundra, stopping every ten or fifteen miles so that crews could get out and conduct test drills that would bring up a sample of what lay beneath the rocky red soil. It wasn't hard work, really, and it gave Jeff a chance to see the northern regions. Yet he was quiet most of the time, rarely saying much to anyone; in fact, he seemed to be bored by the whole thing. The other people on the expedition were aware of what had recently happened to him, of course, and they attempted to draw him out of his shell, but after awhile it became obvious that he just didn't want to talk, and so they finally gave up and left him alone.

Then, on the eleventh day of the mission, two days before the expedition was scheduled to return to Arsia, the *Collins* located the Phoenix lander.

This was a NASA probe that landed back in '08, the first to confirm the presence of subsurface ice on Mars. Unlike many of the other American and European probes that explored Mars before the first manned expeditions, Phoenix didn't have a rover; instead, it used a robotic arm to dig down into the regolith, scooping up samples that were analyzed by its onboard chemical lab. The probe was active for only a few months before its battery died during the long Martian winter, but it was one of the milestones leading to human colonization.

As they expected, the expedition members found Phoenix half-buried beneath wind-blown sand and dust, with only its upper platform and solar vanes still exposed. Nonetheless, the lander was intact, and although it was too heavy to be loaded aboard the airship, the crew removed its arm to be taken home and added to the base museum. And they found one more thing—the Mars library.

During the 1990s, while the various Mars missions were still in their planning stages, the Planetary Society had made a proposal to NASA: one of those probes should carry a DVD containing a cache of literature, visual images, and audio recordings pertaining to Mars. The ostensible purpose would be to furnish future colonists with a library for their entertainment, but the unspoken reason was to pay tribute to the generations of writers, artists, and filmmakers whose works had inspired the real-life exploration of Mars.

NASA went along with those proposals, so a custom-designed DVD, made of silica glass to ensure its long-term survival, was prepared for inclusion on a future mission. A panel selected eighty-four novels, short stories, articles, and speeches, with the authors ranging from eighteenth century fantasists like Swift and Voltaire to twentieth century science fiction authors like Niven and Benford. A digital gallery of sixty visual images—including everything from paintings by Bonestell, Emshwiller, and Whelan to a lobby card from a Flash Gordon serial and a cover of a *Weird Science* comic book—was chosen as well. The final touch were four audio clips, the most notable of which were the infamous 1938 radio broadcast of *The War of the Worlds* and a discussion of the same between H.G. Wells and Orson Welles.

Now called "Visions of Mars," the disk was originally placed aboard NASA's Mars Polar Lander, but that probe was destroyed when its booster failed shortly after launch and it crashed in the Atlantic. So an identical copy was put on Phoenix, and this time it succeeded in getting to Mars. And so the disk had remained in the *Vastitas Borealis* for the past forty years, awaiting the day when a human hand would remove it from its place on Phoenix's upper fuselage.

And that hand happened to be Jeff Halbert's.

The funny thing is, no one on the expedition knew the disk was there. It had been

forgotten by then, its existence buried deep within the old NASA documents I'd been sent from Earth, so I hadn't told anyone to retrieve it. And besides, most of the guys on the *Collins* were more interested in taking a look at an antique lander than the DVD that happened to be attached to it. So when Jeff found the disk and detached it from Phoenix, it wasn't like he'd made a major find. The attitude of almost everyone on the mission was *oh, yeah, that's kind of neat . . . take it home and see what's on it*.

Which was easier said than done. DVD drives had been obsolete for more than twenty years, and the nearest flea market where one might find an old computer that had one was . . . well, it wasn't on Mars. But Jeff looked around, and eventually he found a couple of dead comps stashed in a storage closet, salvage left over from the first expeditions. Neither were usable on their own, but with the aid of a service manual, he was able to swap out enough parts to get one of them up and running, and once it was operational, he removed the disk from its scratched case and gently slid it into the slot. Once he was sure that the data was intact and hadn't decayed, he downloaded everything into his personal pad. And then, at random, he selected one of the items on the menu—"The Martian Way" by Isaac Asimov—and began to read.

Why did Jeff go to so much trouble? Perhaps he wanted something to do with his free time besides mourn for the dead. Or maybe he wanted to show the others who'd been on the expedition that they shouldn't have ignored the disk. I don't know for sure, so I can't tell you. All I know is that the disk first interested him, then intrigued him, and finally obsessed him.

It took awhile for me to become aware of the change in Jeff. As much as I was concerned for him, he was one of my lesser problems. As general manager, on any given day I had a dozen or more different matters that needed my attention, whether it be making sure that the air recycling system was repaired before we suffocated to death or filling out another stack of forms sent from Huntsville. So Jeff wasn't always on my mind; when I didn't hear from Dr. Rosenfeld for a while, I figured that the two of them had managed to work out his issues, and turned to other things.

Still, there were warning signs, stuff that I noticed but to which I didn't pay much attention. Like the day I was monitoring the radio crosstalk from the monkeys laying sewage pipes in the foundation of Hab Three, and happened to hear Jeff identify himself as Lieutenant Gullivar Jones. The monkeys sometimes screwed around like that on the com channels, and the foreman told Halbert to knock it off and use his proper call sign . . . but when Jeff answered him, his response was weird: "*Aye, sir. I was simply ruminating on the rather peculiar environment in which we've found ourselves.*" He even faked a British accent to match the Victorian diction. That got a laugh from the other monkeys, but nonetheless I wondered who Gullivar Jones was and why Jeff was pretending to be him.

There was also the time Jeff was out on a dozer, clearing away the sand that had been deposited on the landing field during a dust storm a couple of days earlier. Another routine job to which I hadn't been paying much attention until the shift supervisor at the command center paged me: "*Chief, there's something going on with Halbert. You might want to listen in.*"

So I tapped into the comlink, and there was Jeff: "*Affirmative, MainCom: I just saw something move out there, about a half-klick north of the periphery.*"

"Roger that, Tiger Four-Oh," the supervisor said. "*Can you describe again, please?*"

A pause, then: "*A big creature, about ten feet tall, with eight legs. And there was a woman riding it . . . red-skinned, and—*" an abrupt laugh "*—stark naked, or just about.*"

Something tugged at my memory, but I couldn't quite put my finger on it. When the shift supervisor spoke again, his voice had a patronizing undertone. "*Yeah . . . uh,*

right, Tiger Four-Oh. We just checked the LRC, though, and there's nothing on the scope except you."

"They're gone now. Went behind a boulder and vanished." Another laugh, almost gleeful. "But they were out there, I promise!"

"Affirmative, Four-Oh." A brief pause. "If you happen to see any more thoats, let us know, okay?"

That's when I remembered. What Jeff had described was a beast from Edgar Rice Burroughs' Mars novels. And the woman riding it? That could have only been Dejah Thoris. Almost everyone who came to Mars read Burroughs at one point or another, but this was the first time I'd ever heard of anyone claiming to have seen the Princess of Helium.

Obviously, Jeff had taken to playing practical jokes. I made a mental note to say something to him about that, but then forgot about it. As I said, on any given day I handled any number of different crises, and someone messing with his supervisor's head ranked low on my priority list.

But that wasn't the end of it. In fact, it was only the beginning. A couple of weeks later, I received a memo from the quartermaster: someone had tendered a request to be transferred to private quarters, even though that was above his pay grade. At Arisia in those days, before we got all the habs built, individual rooms were at a premium and were generally reserved for management, senior researchers, married couples, company stooges, and so forth. In this case, though, the other guys in this particular person's dorm had signed a petition backing his request, and the quartermaster himself wrote that, for the sake of morale, he was recommending that this individual be assigned his own room.

I wasn't surprised to see that Jeff Halbert was the person making the request. By then, I'd noticed that his personality had undergone a distinct change. He'd let his hair grow long, eschewing the high-and-tight style preferred by people who spent a lot of time wearing a hardsuit helmet. He rarely shared a table with anyone else in the wardroom, and instead ate by himself, staring at his datapad the entire time. And he was now talking to himself on the comlink. No more reports of Martian princesses riding eight-legged animals, but rather a snatch of this ("The Martians seem to have calculated their descent with amazing subtlety . . .") or a bit of that ("The Martians gazed back up at them for a long, long silent time from the rippling water . . .") which most people wouldn't have recognized as being quotes from Wells or Bradbury.

So it was no wonder the other monkey-house residents wanted to get rid of him. Before I signed the request, though, I paid Dr. Rosenfeld a visit. The station psychologist didn't have to ask why I was there; he asked me to shut the door, then let me know what he thought about Jeff.

"To tell the truth," he began, "I can't tell if he's getting better or worse."

"I can. Look, I'm no shrink, but if you ask me, he's getting worse."

Karl shook his head. "Not necessarily. Sure, his behavior is bizarre, but at least we no longer have to worry about suicide. In fact, he's one of the happiest people we have here. He rarely speaks about his loss anymore, and when I remind him that his wife and parents are dead, he shrugs it off as if this was something that happened a long time ago. In his own way, he's quite content with life."

"And you don't think that's strange?"

"Sure, I do . . . especially since he's admitted to me that he'd stopped taking the antidepressants I prescribed to him. And that's the bad news. Perhaps he isn't depressed any more, or at least by clinical standards . . . but he's becoming delusional, to the point of actually having hallucinations."

I stared at him. "You mean, the time he claimed he spotted Dejah Thoris . . . you're saying he actually *saw* that?"

"Yes, I believe so. And that gave me a clue as to what's going on in his mind." Karl picked up a penknife, absently played with it. "Ever since he found that disk, he's become utterly obsessed with it. So I asked him if he'd let me copy it from his pad, which he did, and after I asked him what he was reading, I checked it out for myself. And what I discovered was that, of all the novels and stories that are on the disk, the ones that attract him the most are also the ones that are least representative of reality. That is, the stuff that's about Mars, but not as we know it."

"Come again?" I shook my head. "I don't understand."

"How much science fiction have you read?"

"A little. Not much."

"Well, lucky for you, I've read quite a bit." He grinned. "In fact, you could say that's why I'm here. I got hooked on that stuff when I was a kid, and by the time I got out of college, I'd pretty much decided that I wanted to see Mars." He became serious again. "Okay, try to follow me. Although people have been writing about Mars since the 1700s, it wasn't until the first Russian and American probes got out here in the 1960s that anyone knew what this place is really like. That absence of knowledge gave writers and artists the liberty to fill in the gap with their imaginations . . . or at least until they learned better. Understand?"

"Sure." I shrugged. "Before the 1960s, you could have Martians. After that, you couldn't have Martians anymore."

"Umm . . . well, not exactly." Karl lifted his hand, teetered it back and forth. "One of the best stories on the disk is 'A Rose For Ecclesiastes' by Roger Zelazny. It was written in 1963, and it has Martians in it. And some stories written before then were pretty close to getting it right. But for the most part, yes . . . the fictional view of Mars changed dramatically in the second half of the last century, and although it became more realistic, it also lost much of its romanticism."

Karl folded the penknife, dropped it on his desk. "Those aren't the stories Jeff's reading. Greg Bear's 'A Martian Ricorso,' Arthur C. Clarke's 'Transit of Earth,' John Varley's 'In the Hall of the Martian Kings' . . . anything similar to the Mars we know, he ignores. Why? Because they remind him of where he is . . . and that's not where he wants to be."

"So . . ." I thought about it for a moment. "He's reading the older stuff instead?"

"Right." Karl nodded. "Stanley Weinbaum's 'A Martian Odyssey,' Otis Adelbert Kline's *The Swordsman of Mars*, A.E. van Vogt's 'The Enchanted Village' . . . the more unreal, the more he likes them. Because those stories are about not the drab, lifeless planet where he's stuck, but instead a planet of native Martians, lost cities, canal systems . . ."

"Okay, I get it."

"No, I don't think you do . . . because I'm not sure I do, either, except to say that Jeff appears to be leaving us. Every day, he's taking one more step into this other world . . . and I don't think he's coming back again."

I stared at him, not quite believing what I'd just heard. "Jeez, Karl . . . what am I going to do?"

"What *can* you do?" He leaned back in his chair. "Not much, really. Look, I'll be straight with you . . . this is beyond me. He needs the kind of treatment that I can't give him here. For that, he's going to have to wait until he gets back to Earth."

"The next ship isn't due for another fourteen months or so."

"I know . . . that's when I'm scheduled to go back, too. But the good news is that he's happy and reasonably content, and doesn't really pose a threat to anyone . . . except maybe by accident, in which case I'd recommend that you relieve him of any duties that would take him outside the hab."

"Done." The last thing anyone needed was to have a delusional person out on the

surface. Mars can be pretty unforgiving when it comes to human error, and a fatal mistake can cost you not only your own life, but also that of the guy next to you. "And I take it that you recommend that his request be granted, too?"

"It wouldn't hurt, no." A wry smile. "So long as he's off in his own world, he'll be happy. Make him comfortable, give him whatever he wants . . . within reason, at least . . . and leave him alone. I'll keep an eye on him and will let you know if his condition changes, for better or worse."

"Hopefully for the better."

"Sure . . . but I wouldn't count on it." Karl stared straight at me. "Face it, chief . . . one of your guys is turning into a Martian."

I took Jeff off the outside-work details and let it be known that he wasn't permitted to go marswalking without authorization or an escort, and instead reassigned him to jobs that would keep him in the habitats: working in the greenhouse, finishing the interior of Hab 2, that sort of thing. I was prepared to tell him that he was being taken off the outside details because he'd reached his rem limit for radiation exposure. But he never questioned my decision but only accepted it with the same quiet, spooky smile that he'd come to give everyone.

I also let him relocate to private quarters, a small room on Hab 2's second level that had been unoccupied until then. As I expected, there were a few gripes from those still having to share a room with someone else; however, most people realized that Jeff was in bad shape and needed his privacy. After he moved in, though, he did something I didn't anticipate: he changed his door lock's password to something no one else knew. This was against station rules—the security office and the general manager were supposed to always have everyone's lock codes—but Karl assured me that Jeff meant no harm. He simply didn't want to have anyone enter his quarters, and it would help his peace of mind if he received this one small exemption. I went along with it, albeit reluctantly.

After that, I had no problems with Jeff for a while. He assumed his new duties without complaint, and the reports I received from department heads told me that he was doing his work well. Karl updated me every week; his patient hadn't yet shown any indications of snapping out of his fugue, but neither did he appear to be getting worse. And although he was no longer interacting with any other personnel except when he needed to, at least he was no longer telling anyone about Martian princesses or randomly quoting obscure science fiction stories over the comlink.

Nonetheless, there was the occasional incident. Such as when the supply chief came to me with an unusual request Jeff had made: several reams of hemp paper, and as much soy ink as could be spared. Since both were by-products of greenhouse crops grown at either Arsia Station or one of the other colonies, and thus not imported from Earth, they weren't particularly scarce. Still, what could Jeff possibly want with that much writing material? I asked Karl if Jeff had told him that he was keeping a journal; the doctor told me that he hadn't, but unless either paper or ink were in short supply, it couldn't hurt to grant that request. So I signed off on this as well, although I told the supply chief to subtract the cost from Jeff's salary.

Not long after that, I heard from one of the communications officers. Jeff had asked her to send a general memo to the other colonies: a request for downloads of any Mars novels or stories that their personnel might have. The works of Bradbury, Burroughs, and Brackett were particularly desired, although stuff by Moorcock, Williamson, and Sturgeon would also be appreciated. In exchange, Jeff would send stories and novels he'd downloaded from the Phoenix disk.

Nothing wrong there, either. By then, Mars was on the opposite side of the Sun from Earth, so Jeff couldn't make the same request from Huntsville. If he was run-

ning out of reading material, then it made sense that he'd have to go begging from the other colonies. In fact, the com officer told me she'd had already received more than a half-dozen downloads; apparently quite a few folks had Mars fiction stashed in the comps. Nonetheless, it was unusual enough that she thought I should know about it. I asked her to keep me posted, and shrugged it off as just another of a long series of eccentricities.

A few weeks after that, though, Jeff finally did something that rubbed me the wrong way. As usual, I heard about it from Dr. Rosenfeld.

"Jeff has a new request," he said when I happened to drop by his office. "In the future, he would prefer to be addressed as 'Your Majesty' or 'Your Highness,' in keeping with his position as the Emperor of Mars."

I stared at him for several seconds. "Surely you're joking," I said at last.

"Surely I'm not. He is now the Emperor Jeffery the First, sovereign monarch of the Great Martian Empire, warlord and protector of the red planet." A pause, during which I expected Karl to grin and wink. He didn't. "He doesn't necessarily want anyone to bow in his presence," he added, "but he does require proper respect for the crown."

"I see." I closed my eyes, rubbed the bridge of my nose between my thumb and forefinger, and counted to ten. "And what does that make me?"

"Prime Minister, of course." The driest of smiles. "Since his title is hereditary, His Majesty isn't interested in the day-to-day affairs of his empire. That he leaves up to you, with the promise that he'll refrain from meddling with your decisions . . ."

"Oh, how fortunate I am."

"Yes. But from here on, all matters pertaining to the throne should be taken up with me, in my position as Royal Physician and Senior Court Advisor."

"Uh-huh." I stood up from my chair. "Well, if you'll excuse me, I think the Prime Minister needs to go now and kick His Majesty's ass."

"Sit down." Karl glared at me. "Really, I mean it. Sit."

I was unwilling to sit down again, but neither did I storm out of his office. "Look, I know he's a sick man, but this has gone far enough. I've given him his own room, relieved him of hard labor, given him paper and ink . . . for what, I still don't know, but he keeps asking for more . . . and allowed him com access to the other colonies. Just because he's been treated like a king doesn't mean he is a king."

"Oh, I agree. Which is why I've reminded him that his title is honorary as well as hereditary, and as such there's a limit to royal privilege. And he understands this. After all, the empire is in decline, having reached its peak over a thousand years ago, and since then the emperor has had to accept certain sacrifices for the good of the people. So, no, you won't see him wearing a crown and carrying a scepter, nor will he be demanding that a throne be built for him. He wants his reign to be benign."

Hearing this, I reluctantly took my seat again. "All right, so let me get this straight. He believes that he's now a king . . ."

"An emperor. There's a difference."

"King, emperor, whatever . . . he's not going to be bossing anyone around, but will pretty much let things continue as they are. Right?"

"Except that he wants to be addressed formally, yeah, that's pretty much it." Karl sighed, shook his head. "Let me try to explain. Jeff has come face to face with a reality that he cannot bear. His parents, his fiancé, the child they wanted to have . . . they're all dead, and he was too far away to prevent it, or even go to their funerals. This is a very harsh reality that he needs to keep at bay, so he's built a wall around himself . . . a wall of delusion, if you will. At first, it took the form of an obsession with fantasy, but when that wouldn't alone suffice, he decided to enter that fantasy, become part of it. This is where Emperor Jeffery the First of the Great Martian Empire comes in."

"So he's protecting himself?"

"Yes . . . by creating a role that lets him believe that he controls his own life." Karl shook his head. "He doesn't want to actually run Arsia, chief. He just wants to pretend that he does. As long as you allow him this, he'll be all right. Trust me."

"Well . . . all right." Not that I had much choice in the matter. If I was going to have a crazy person in my colony, at least I could make sure that he wouldn't endanger anyone. If that meant indulging him until he could be sent back to Earth, then that was what I'd have to do. "I'll pass the word that His Majesty is to be treated with all due respect."

"That would be great. Thanks." Karl smiled. "Y'know, people have been pretty supportive. I haven't heard of anyone taunting him."

"You know how it is. People here tend to look out for each other . . . they have to." I stood up and started to head for the door, then another thought occurred to me. "Just one thing. Has he ever told you what he's doing in his room? Like I said, he's been using a lot of paper and ink."

"Yes, I've noticed the ink stains on his fingers." Karl shook his head. "No, I don't know. I've asked him about that, and the only thing he's told me is that he's preparing a gift for his people, and that he'll allow us to see it when the time comes."

"A gift?" I raised an eyebrow. "Any idea what it is?"

"Not a clue . . . but I'm sure we'll find out."

I kept my promise to Dr. Rosenfeld and put out the word that Jeff Halbert was heretofore to be known as His Majesty, the Emperor. As I told Karl, people were generally accepting of this. Oh, I heard the occasional report of someone giving Jeff some crap about this—exaggerated bows in the corridors, ill-considered questions about who was going to be his queen, and so forth—but the jokers who did this were usually pulled aside and told to shut up. Everyone at Arsia knew that Jeff was mentally ill, and that the best anyone could do for him was to let him have his fantasy life for as long as he was with us.

By then, Earth was no longer on the other side of the Sun. Once the third planet and Mars began moving toward conjunction, a cycleship could make the trip home. So only a few months remained until Jeff would board a shuttle. Since Karl would be returning as well, I figured he'd be in good hands, at least until they climbed into zombie tanks to hibernate for the long ride to Earth. Until then, all we had to do was keep His Majesty happy.

That wasn't hard to do. In fact, Karl and I had a lot of help. Once people got used to the idea that a make-believe emperor lived among them, most of them actually seemed to enjoy the pretense. When he walked through the habs, folks would pause whatever they were doing to nod to him and say "Your Majesty" or "Your Highness." He was always allowed to go to the front of the serving line in the mess hall, and there was always someone ready to hold his chair for him. And I noticed that he even picked up a couple of consorts, two unattached young women who did everything from trim his hair—it had grown very long by then, with a regal beard to match—to assist him in the Royal Gardens (aka the greenhouse) to accompany him to the Saturday night flicks. As one of the girls told me, the Emperor was the perfect date: always the gentleman, he'd unfailingly treated them with respect and never tried to take advantage of them. Which was more than could be said for some of the single men at Arsia.

After a while, I relaxed the rule about not letting him leave the habs, and allowed him to go outside as long as he was under escort at all times. Jeff remembered how to put on a hardsuit—a sign that he hadn't completely lost touch with reality—and he never gave any indication that he was on the verge of opening his helmet. But once

he walked a few dozen yards from the airlock, he'd often stop and stare into the distance for a very long time, keeping his back to the rest of the base and saying nothing to anyone.

I wondered what he was seeing then. Was it a dry red desert, cold and lifeless, with rocks and boulders strewn across an arid plain beneath a pink sky? Or did he see something no one else could: forests of giant lichen, ancient canals upon which sailing vessels slowly glided, cities as old as time from which John Carter and Tars Tarkas rode to their next adventure or where tyrants called for the head of the outlaw Eric John Stark? Or was he thinking of something else entirely? A mother and a father who'd raised him, a woman he'd once loved, a child whom he'd never see?

I don't know, for the Emperor seldom spoke to me, even in my role as his Prime Minister. I think I was someone he wanted to avoid, an authority figure who had the power to shatter his illusions. Indeed, in all the time that Jeff was with us, I don't think he and I said more than a few words to each other. In fact, it wasn't until the day that he finally left for Earth that he said anything of consequence to me.

That morning, I drove him and Dr. Rosenfeld out to the landing field, where a shuttle was waiting to transport them up to the cycloship. Jeff was unusually quiet; I couldn't easily see his expression through his helmet faceplate, but the few glimpses I had told me that he wasn't happy. His Majesty knew that he was leaving his empire. Karl hadn't softened the blow by telling him a convenient lie, but instead had given him the truth: they were returning to Earth, and he'd probably never see Mars again.

Their belongings had already been loaded aboard the shuttle when we arrived, and the handful of other passengers were waiting to climb aboard. I parked the rover at the edge of the landing field and escorted Jeff and Karl to the spacecraft. I shook hands with Karl and wished him well, then turned to Jeff.

"Your Majesty . . ." I began.

"You don't have to call me that," he said.

"Pardon me?"

Jeff stepped closer to me. "I know I'm not really an emperor. That was something I got over a while ago . . . I just didn't want to tell anyone."

I glanced at Karl. His eyes were wide, and within his helmet he shook his head. This was news to him, too. "Then . . . you know who you really are?"

A brief flicker of a smile. "I'm Jeff Halbert. There's something wrong with me, and I don't really know what it is . . . but I know that I'm Jeff Halbert and that I'm going home." He hesitated, then went on. "I know we haven't talked much, but I . . . well, Dr. Rosenfeld has told me what you've done for me, and I just wanted to thank you. For putting up with me all this time, and for letting me be the Emperor of Mars. I hope I haven't been too much trouble."

I slowly let out my breath. My first thought was that he'd been playing me and everyone else for fools, but then I realized that his megalomania had probably been real, at least for a time. In any case, it didn't matter now; he was on his way back to Earth, the first step on the long road to recovery.

Indeed, many months later, I received a letter from Karl. Shortly after he returned to Earth, Jeff was admitted to a private clinic in southern Vermont, where he began a program of psychiatric treatment. The process had been painful; as Karl had deduced, Jeff's mind had repressed the knowledge of his family's deaths, papering over the memory with fantastical delusions he'd derived from the stories he'd been reading. The clinic psychologists agreed with Dr. Rosenfeld: it was probably the retreat into fantasy that saved Jeff's life, by providing him with a place to which he was able to escape when his mind was no longer able to cope with a tragic reality. And in the end, when he no longer needed that illusion, Jeff returned from madness. He'd never

see a Martian princess again, or believe himself to be the ruling monarch of the red planet.

But that was yet to come. I bit my tongue and offered him my hand. "No trouble, Jeff. I just hope everything works out for you."

"Thanks." Jeff shook my hand, then turned away to follow Karl to the ladder. Then he stopped and looked back at me again. "One more thing . . ."

"Yes?"

"There's something in my room I think you'd like to see. I disabled the lock just before I left, so you won't need the password to get in there." A brief pause. "It was 'Thuvia,' just in case you need it anyway."

"Thank you." I peered at him. "So . . . what is it?"

"Call it a gift from the emperor," he said.

I walked back to the rover and waited until the shuttle lifted off, then I drove to Hab 2. When I reached Jeff's room, though, I discovered that I wasn't the first person to arrive. Several of his friends—his fellow monkeys, the emperor's consorts, a couple of others—had already opened the door and gone in. I heard their astonished murmurs as I walked down the hall, but it wasn't until I entered the room that I saw what amazed them.

Jeff's quarters were small, but he'd done a lot with them over the last year and a half. The wall above his bed was covered with sheets of paper that he'd taped together, upon which he'd drawn an elaborate mural. Here was the Mars over which the Emperor had reigned: boat-like aircraft hovering above great domed cities, monstrous creatures prowling red wastelands, bare-chested heroes defending beautiful women with rapiers and radium pistols, all beneath twin moons that looked nothing like the Phobos and Deimos we knew. The mural was crude, yet it had been rendered with painstaking care, and was nothing like anything we'd ever seen before.

That wasn't all. On the desk next to the comp was the original Phoenix disk, yet Jeff hadn't been satisfied just to leave it behind. A wire-frame bookcase had been built beside the desk, and neatly stacked upon its shelves were dozens of sheaves of paper, some thick and some thin, each carefully bound with hemp twine. Books, handwritten and handmade.

I carefully pulled down one at random, gazed at its title page: *Edison's Conquest of Mars*, by Garrett P. Serviss. I put it back on the shelf, picked up another: "Omnilingual," by H. Beam Piper. I placed it on the shelf, then pulled down yet another: "The Martian Crown Jewels," by Poul Anderson. And more, dozens more . . .

This was what Jeff had been doing all this time: transcribing the contents of the Phoenix disk, word by word. Because he knew, in spite of his madness, that he couldn't stay on Mars forever, and he wanted to leave something behind. A library, so that others could enjoy the same stories that had helped him through a dark and troubled time.

The library is still here. In fact, we've improved it quite a bit. I had the bed and dresser removed, and replaced them with armchairs and reading lamps. The mural has been preserved within glass frames, and the books have been rebound inside plastic covers. The Phoenix disk is gone, but its contents have been downloaded into a couple of comps; the disk itself is in the base museum. And we've added a lot of books to the shelves; every time a cycleship arrives from Earth, it brings a few more volumes for our collection. It's become one of the favorite places in Arsia for people to relax. There's almost always someone there, sitting in a chair with a novel or story in his or her lap.

The sign on the door reads *Imperial Martian Library*: an inside joke that newcomers and tourists don't get. And, yes, I've spent a lot of time there myself. It's never too late to catch up on the classics. ○

PETOPIA

Benjamin Crowell

One of the characters in this story is based closely on a guinea pig that lives in Ben's kitchen. After detailed scientific observations of his family pet's habits and lifestyle, Ben is starting to lose confidence in Darwin's theory of natural selection.

Rain slid down like sweat over the mountain of beige and black computer cases, as if the machines were still having trouble adjusting to the climate. Aminata Diallo twirled a screw, snipped a ribbon cable, and pulled a tiny solid-state drive out of the machine on her workbench.

The drive had gone in the basket, and she was getting up to fetch the next computer from the tall, unsteady heap that slouched against the back wall of the alley, when motion caught her eye at the base of the pile—a rat? She'd let her guard down because it was so much safer now that Alseny had her working here instead of at the dump.

There! Telltale ripples were still bouncing back and forth in a greenish puddle half-hidden in the shadows. She thought she could make out a furry leg sticking down into the water. Too stocky for a rat. She palmed the Phillips screwdriver and wished for shoes instead of sandals.

"Hello?" a squeaky little voice said in English.

Mina turned the possibilities over in her mind. She'd never been inclined to believe in the spirits Father mumbled about, but when confronted with a real one it would be foolhardy to ignore the basic precautions her *baba* had taught her. Then again, there could be a perfectly ordinary explanation for what was happening.

"Hello," she parroted back, feeling clumsy about the pronunciation. She kept her eyes lowered respectfully.

It forded the dirty puddle and trotted out, dripping, into the muddy alley: a shaggy little purple thing with big, liquid eyes and floppy ears. She fought down an urge to giggle at the creature's bedraggled cuteness, because that would certainly offend it. It launched into rapid-fire English.

"I'm sure what you say is correct, sir," Mina replied in Susu, "but I'm afraid my English isn't very good."

It just stared at her and cocked its head, so she did her best to reformulate her speech in what little French she'd learned when she was still in school.

"*Bonjour mademoiselle,*" the dripping apparition replied, in what she imagined was a very posh Parisian accent. "I've been lost. Could you please ship me to 1324 Telegraph Avenue, Oakland, California?"

California? She'd only gone as far as African geography before *Baba* got fired and the money for school fees and uniforms ran out, but she knew that California was in the United States. They had surfing, and movie studios. These computers must have come on a ship from California, and with them, this—spirit? animal? machine? Definitely not a spirit. If spirits existed at all, it was probably only in dusty old places like *Baba's* home village, not modern ones like California. And although parrots could talk, she'd never heard of a real animal with purple fur.

"Can you talk about all kinds of things?" she asked, "or can you only say things people told you how to say?"

"I can talk about all kinds of things. What's your favorite dessert?"

Smarter than a parrot, but not as smart as a person. Some kind of machine. She knew better than to answer its question. Alseny didn't volunteer details about what he got off the drives, but people talked, and Mina had a general idea of how the business worked. *What's this rich foreigner's identification number? His birthday? His mother's maiden name? What about the name of his first pet, the brand of his first car, his favorite dessert?*

"Shut yourself off," she told it. It did, and she went back to work.

Mina hurried home, keeping a tight grip on the two plastic shopping bags. One held her tools and her collapsible umbrella, the other her bowl, her fork, and the furry machine. The rain had stopped. The electricity was out, as usual, and only in one place where she cut across the *Avenue de la République* was there a pool of blue fluorescent light spreading out from the internet café, which had a generator. She tried to look very busy and avoid attracting notice. You never knew what a soldier might do, and although the idle men on the streetcorners were usually harmless, it was best for a young girl to avoid their questions about why she was out at night without a chaperon. What would she say? *My brother is too young, and my father begs in the Place du 23 Février for money to buy palm wine.*

Through the window of her house, she was surprised to see a gleam of yellow light reflected by the corrugated iron wall inside. Was one of her parents home already? But when she got inside, she saw that it was neither *Nga* nor *Baba* but her brother Raphael who had the lantern on.

"What are you doing? Have you had that lit all evening?" She cuffed him on the head. (These days she had to reach up to do that.) "You know what batteries cost!"

"I was lonely in the dark." He had on her hand-me-down black T-shirt that was too small for him, and for a moment it seemed to Mina as though the part of him that it covered might fade away completely if the lantern-light ceased.

"You shouldn't have time to be lonely. Did you sweep the floor and fetch water like *Nga* told you?"

"Carrying water is a woman's work."

So he'd ignored his chores and spent his day fiddling with his chess board. It was sitting on the table, set up in some position that Mina was sure was very interesting to an expert. Propped open next to it was one of *Baba's* old dog-eared books, a thick volume with diagrams of boards and finicky symbols that showed the moves. It was in a foreign language, maybe German, but she supposed Raphael could figure it out without understanding the words. Marching past the board, like tiny mortals ignoring a battle of the gods, a stream of ants went to and from an orange peel. Without yet putting down either shopping bag, she snagged the peel between two fingers and threw it out the window.

A woman's work. The lantern threw her shadow onto the street, which was so narrow that the image of her head was cast onto old Mme Soumah's crumbling stucco wall. The arms stretched out long like the melted plastic parts when they burned the computers at the dump to get the copper out. She closed her eyes, and the weight of the two shopping bags increased, became the weight of the two men in her family pulling her down.

"All right, give me the lantern. I've got to go out to the toilet anyway."

She looked around to put down the bags, and then the hint of an idea flickered uncertainly in a corner of her brain. She placed one bag on the floor to free a hand for the lantern, but kept the one with the talking machine in it.

Someone was using the toilet, and, while she was waiting outside the tattered blue blanket they used as a curtain, she tried to fan her spark of an idea back into a flame. Raphael was in that long period that a male was allowed before he had to be grown up. The women had to baby him, and he got the best pieces of meat. Then the sun would rise one day and he would be a soldier, a beggar, a glue-sniffer, a stander on streetcorners: no longer a crushing burden but merely a danger or a nuisance. What Mina needed was a way to kick him over that threshold.

When it was her turn she sat down and pulled the electronic animal out. She combed her fingers through its fur in the lantern-light, but it didn't seem to have a power switch. "Wake up," she whispered experimentally, and then realized sheepishly that she'd said it in Susu. "*Réveille-toi.*"

Its eyes had never been closed, but now they came alive and moved. "Hello again," it said loudly in French. "Are we at school?"

"School? No, this is the toilet near my house. Could you speak more slowly, and lower your voice a little, please?"

"Oh, you go home for lunch?" Its voice softened but didn't sound whispery, so it was suddenly like hearing him from far away. "It's after one o'clock, though. You'll get in big trouble. You'd better hurry back to school right away. You can leave me at home. It's against the rules to bring me there."

"You're confused, *Monsieur*. It may be one o'clock in California, but this is a different time zone. Anyway, I don't go to school."

"You have to," the machine said accusingly. "You're not a grownup. I can tell." Was it her imagination, or was that a little pout on his lip? He really was simply the sweetest thing imaginable. "You're about fifteen, aren't you?"

"Sixteen. But things are different here than in California. People aren't all rich. My family doesn't have enough money for school right now, and if they did they would send my brother, not me."

"Oh, I see." It tilted its little purple head adorably. "You should be going to school, though. After I go back to California I won't be here to remind you, but you have to remember to go anyway."

"*Bon*, we should talk about that. I don't have money to send you back to America, so you may be here for a long time."

"Petopia will reimburse you for reasonable shipping costs."

"What's Petopia?"

"Petopia is a world that Jaybeemallorme and Tiborhora"—the foreign names blurred together in her ears—"made in Jaybee's garage while they were eating unhealthy amounts of kimchi and Little Caesar's pizza. It's low-rez, it's silly, and while you're there you play the part of your Petopian. You can get your own lovable Petopian at . . . sorry, I'm not picking up a wireless signal here, so I can't tell you about local stores that sell Petopians."

Mina didn't know who Little Caesar was, or about kimchi and low-rez, but she got the general idea. "You're a Petopian?"

"Yes. My name is Jelly." When it pronounced its name it switched abruptly to an American accent.

"So I don't need a store. I already have a Petopian."

It thought that over. "Well, you aren't my registered user. And you're using me ofline, so I'm in demo mode. Unless you log in with the right password, you can't access all the features of Petopia's persistent virtual reality."

"Persistent . . ."

"Virtual reality. The Petopia world."

"So . . . I *have* you, but I don't *own* you? And Petopia is like an imagining game—for little rich kids."

"Petopia isn't Webfrenz," the machine said, with a good simulation of disdain. "Our demographic is older." His manner communicated the feeling perfectly: you and I, Mina and Jelly—we're alike, aren't we? Not like those silly *little* kids. Had some American programmer written that reaction like a script for a play? "And you don't have to be rich to be a Petopiowner. You can get the basic plan for only fifty dollars a month."

How much was that? A dollar was down to about thirty or forty eurocents these days, wasn't it? And a euro was . . . Great God, they could spend that kind of money on a child's game? And that was for the "basic plan." Evidently even their imaginary world was split between rich and poor.

When she got back to the house she casually took Jelly out of the bag.

"What's that?" Raphael demanded.

"What's what?"

"The stuffed animal."

"Oh, don't worry about Jelly. I don't think you'd like him. He's a little old for your, ah, *demographic*." She wasn't sure if she was using the fancy French word correctly, but it was unlikely that Raphael would know any better.

Once Jelly had heard the list of Raphael's daily duties, and verified that it was backed by their mother's authority, he made it his singleminded duty to enforce it. Mina had only hoped vaguely to enlist him as a spy, one whom Raphael would tolerate because he was also a toy. But even though Jelly was too small to hit Raphael, he had mysterious ways of getting him to obey. Mina never asked how it worked, for fear of breaking the charm, but when she came home in the evening the big plastic water jugs would all be full, the house would be clean, and Raphael and Jelly would be playing chess in light so dim that they must be keeping track of the pieces in their heads. Raphael took the machine under his wing. At the internet café, he apparently ingratiated himself enough by doing odd jobs that they let him recharge Jelly's battery every morning. Mina began to suspect that they gave him a little cash, too, but he never admitted it.

It was only by chance that she found out what was really happening. It was a Wednesday, and *Baba* had been gone for two nights. *Nga* was worried, of course—perhaps in the same way one would worry about a goat that had jumped a fence, and might damage someone else's garden—but what could she do? She had to clean the rooms at the Novotel in the day, and then go and sell the toilet paper at the bus station in the evening. She asked Mina to go on her midday break and buy some groundnuts and tomatoes for a sauce, if the price was good. It was raining and devilishly hot. Mina slogged through the steamy, foul-smelling streets until she got to the market, and there was Raphael with a big bag over his shoulder, stepping off a minibus. A minibus!

He sat down at a metal table under the awning of a café at the edge of the little market square. Incised on the table, and just barely visible from this distance, were the grid-lines of a chessboard, the faded squares indistinguishable black from white. He leaned on the fence surrounding the café. Oh, so casual: it was something he did all the time. A woman brushed against his arm with a brown chicken she dangled by its legs. She apologized, and he laughed it off. Even though she was older, he met her eyes as directly as a drunken soldier at a checkpoint at night.

Mina went ahead and bought the groundnuts, because a duty was still a duty, and bargained all the more aggressively because of the angry way her heart was beating. The tomato-man was impossible, though—wouldn't go below seventeen thousand francs a kilo, which was robbery, no matter how fresh they were. Meanwhile she kept an eye on Raphael. A prosperously fat Malinké man, with a bald head like a cannonball, came up to the table. He had polio and walked with a cane. He tried to look like he

didn't care whether he got a game or not, but anyone could see that he did, just from the effort it cost him to haul that big body closer to the table on those spindly legs.

Wads of blue ten-thousand-franc notes appeared, and from his bag Raphael produced a chess clock and an inert-looking Jelly, whom he enlisted as a paperweight to hold down the bills by the side of the board.

Mina crept up closer behind Raphael. The sweat rolling down the Malinké's head formed systems of rivers and tributaries. It felt as though God were pressing the market square like a shirt between the plates of a steam iron. The waiter had brought a pot of tea, but neither player disturbed the inverted cups. They were playing some kind of speed game, and it was over quickly. The money went into the fat man's pocket. Mina stifled a sob and crept a little closer.

"Okay, if you want," she heard Raphael say through the din. She could see now that the man had a big, shiny watch on his wrist. They set the board back up, and after a little more negotiation Jelly became the unmoving guardian of another pile of money. This time there were some red twenty-k notes mixed in with the blues. This game lasted longer. A dirty-looking man standing outside the awning tried to give advice, which both players ignored. "*Échec et mat*," Raphael said after a while, and Mina could tell from the way the fat man and the dirty man reacted that it took them both by surprise. Raphael made the money disappear, thanked his opponent for the game, and put a stack of coins on the table for the untouched tea. He swept up the big bag and turned around to go, and then he saw Mina. His eyes showed only the briefest hint of recognition before they rolled away and he strode across the market and into the crowd. She tried to follow him, but she bumped into an old woman and almost knocked her down. By the time she was done apologizing, he had escaped.

While she worked that afternoon, she tried to sort out her thoughts. Despite the jumbled state of her brain, her hands went about their work efficiently, testing the coin-sized solid-state drives and sorting them into the three baskets: encrypted, unencrypted, and broken.

Her first reaction had been horror at the amounts of money Raphael was wasting. But it wasn't money that she and *Nga* had earned, it was money he'd come up with himself. Was he a professional chess hustler now? Was Jelly as inert as he seemed, or was he somehow helping Raphael to make the right moves? If Raphael was making cash, where was he hiding it? Was he spending it on drugs, or going to Wolosso clubs in the afternoons and dancing with buttock-swinging infidel girls in miniskirts? Mina had been dreaming of the day when she could "kick him over the threshold" into manhood so that he wouldn't be a burden anymore, but not this soon—he was only fourteen, even if he looked bigger and older. He seemed to be throwing around more money than *Nga* and Mina made together, so why should they work so hard to feed him, while he deceived them and hid his wealth? She made up virtuous fantasies of what *she* would do with that kind of money: buy *Nga* a fancy gown woven with gold, and a big, soft chair from Japan with a built-in foot massage.

A wet slap of sandals: Raphael.

"You!" She got up and shook a fist at him. "What have you been doing?"

"You mean the chess? Forget that, *Baba's* in trouble! He had a run-in with some soldiers, and now they want money."

She felt like a dog whose bone had been popped out of its mouth while it wasn't looking. "Drunk, or sober?"

"The soldiers, or *Baba*? Anyway I think they're all drunk."

"God is my protector!"

"I know, fucked up, heh? They're at our house, and they want a hundred."

"A hundred what?"

"Euros, stupid, what did you think, francs? They aren't little kids looking for candy money. I've got enough, but it's all in S.P.E., and it's after hours at the hotel, and Ismael—he works at the desk—he doesn't have a phone at home and I don't know his address, so—"

"S.P.E.?"

"*Système de poche électronique*, you know, *certificats*, and—"

"No, I don't know. Where's this money?"

"In here." He pulled Jelly out of his bag.

"He has a hidden pocket, like a *kangourou*?"

"No, no, don't you know anything? It's lots of numbers, it's like a big long computer password that says the bank has to give me this much money. Foreigners use it because it's safe, right? Insured for if you get robbed, whatever. But the company doesn't want the hotels doing *électronique* deals with locals, okay? Too much fraud, 419 and all that." Mina nodded. The Nigerians were to blame for that, of course. Everyone knew they were born thieves, just like the Malinké were born stupid. "But obviously I can't keep stacks of bills in our neighborhood, so I have to do S.P.E. Ismael isn't supposed to let me, but we have an understanding."

"But you can't find Ismael. So where can we go to make Jelly's magic money into real money?"

"The internet café on the *Avenue de la République*. They have electricity at night, and they have an S.P.E. box on the bar so you can pay for your time or buy beer and shit. But because of the fraud thing, this level-two box, it only lets one person do fifty euros a day. It checks your biometrics, and—"

"So if I come, each of us can take out fifty euros."

"Right."

They rode back in a real yellow taxi—with a chesty woman on the flatscreen in the back of the driver's seat intimating huskily, *I bet he drinks Carling Black Label!*—and the alien experience finally brought home to Mina the seriousness of the situation. She cursed herself for being so impressed by the taxi, and the speed with which the shops and kiosks flew by; her own stupid reaction reminded her of *Nga's* sister-in-law's niece's idiotic account of how she'd visited her friend from school, a refugee from a remote province, in the hospital. The niece always dwelled on the height of the building, its silent elevators, its clean floors and windows, and how all the nurses could read like professors. She never seemed to get around to why the friend got in a hospital bed in the first place. It seemed to Mina that her relationship to *Baba* had become as tenuous now as her relationship to the distant cousin's school-friend. Mina tried to make herself remember the times before *Baba* had started to drink, when he'd been kind to her. It was like nerving yourself to chew some old, dried-up rice that you knew would make you sick.

The driver pulled up in front of the blazing lights of the internet café. "We'll be right back," Raphael told him. "We just have to get some cash from the S.P.E. box." The driver tried to object, but Mina and Raphael jumped out too quickly to allow for argument. They plunged into the dark, smoke-filled café and strolled, Raphael confidently and Mina trying to seem so, past the hoodlums and rich boys and tourists shooting things on computer screens. Raphael slid onto a barstool as if it were something he did all the time, and said to Jelly, whom he held belly-up in his lap, "*Réveille-toi.*" Jelly wiggled his furry purple legs and twisted his head to see what was going on. His cute little ears dangled and flopped around endearingly. If only *Baba* could be so sweet and lovable!

"*Bon, Jelly,*" Raphael said, drawing on his store of gutter French, "let's open desktop slash private slash—"

"I have internet connectivity," Jelly announced, with his jaw wagging upside-

down. He didn't really have lips and a tongue, just a speaker, but they'd made him so his mouth moved anyway.

"*Oui*—" Raphael began again.

"I have 17.7 terabytes of software updates," Jelly squeaked.

"Skip that, Jelly. You don't need to phone home right now."

"Relaying GPS coordinates: 166 milliradians north, 239 west."

Mina felt a surge of alarm. "Has he ever been awake in here before?" she asked Raphael in a low voice.

"No." Raphael's brow furrowed. "I just recharge him in the back room. I don't activate him while—"

The taxi driver's sweaty, gap-toothed face was suddenly spraying spit on Mina's nose and cheek. "All right, girly, you paying or not? My meter's still running. Want me to call the police?"

"My use pattern is showing unusual activity," Jelly said. "For your protection, an anti-theft alert has been triggered."

"*Salam, camarade*," Mina told the taxi driver, who was straddling her leg and close to knocking her off the stool. She put her hand on his chest. "I'm sorry for the misunderstanding. We'll just be a moment while we —"

"Leave my sister alone, *cow-boy*—"

"What's the problem here?" the wiry old woman behind the bar demanded, and then a purple ball of fur whirled like a demon, leapt the chasm behind the bar, caromed off of some bottles of liquor, and disappeared down onto the floor. The old woman screamed and grabbed a bottle to brandish against the apparition. Raphael dove across the bar, and Mina wriggled away from the cab driver and ran around to the end to block Jelly's escape route. She crashed into someone and landed on the floor, caught a glimpse of Jelly running by, wedged him against the back of the bar with her knee, and caught him by the scruff of his neck. Raphael dragged her backward. She scrambled to her feet, and they ran out the back door into the dark and familiar alleys of their neighborhood.

Mina clutched Jelly like a rugby ball in the crook of her arm, her hand clamped over his nattering mouth, and as they ran she tried to think. *Leave my sister alone*. She'd never believed that her brother could be more than a donkey looking for some trick to get out from under its load, but she had to admit that he'd not only been resourceful but stood up for her—and for *Baba*, too. She tripped over a beggar who'd already settled down for the night. Stumbling, she lost her grip on Jelly, and he went flying down the alley. Raphael snatched him back up, and by the time Mina caught up with them she saw that the little robot seemed to have calmed down. Maybe she'd underestimated him, just as she'd underestimated her brother. She caught Raphael by the arm.

"Jelly?" she asked.

"Yes?"

"You know, we're not trying to steal you."

"Oh, I know that," he said. "Ms. Nagel threw me away."

"What's this all about?" a toothless old lady demanded, peeping out from behind a dumpster. Raphael apologized, and they moved farther down the alley toward home.

"So Ms. Nagel threw you away," Mina prompted.

"She was tired of paying the bill every month. She's going to tell Piper I was lost."

"But . . . you said your anti-theft alert had been set off . . ."

"Triggered."

"Triggered. Because . . ."

"Because of the unusual use pattern." He didn't seem to see any contradiction there. But maybe that didn't mean he was stupid. Maybe it was like feeling angry

when you knew you shouldn't, or believing in tree-spirits even through you said you were a Muslim. "Who do you think is your owner now?" she asked.

"Petopia, Inc."

"You mean if the person throws you away, the ownership goes back to the company that made you?"

"No, Petopia always owned me. Petopians aren't sold to the users, just licensed."

"I see. So really we have as much claim on you as anyone, right?"

"Let me do this," Raphael said. "He's really mine these days. Or . . . not mine, but—I'm his user, right? It's me that knows how to use him."

"That's stupid! I found him."

"Yeah, you stole him, all fair and legal, and then I stole him from you, just as fair."

"It wasn't stealing. We already discussed that, right, Jelly?"

"Right."

"Okay, so let's say we went back to the internet café," she proposed to the animal. "Now that we've worked all this out, you wouldn't do your theft thing—"

"—my anti-theft alert."

"You wouldn't do that again, would you?"

"Yes, I would. Well, I would if the server sent me the command again, and I think it would, because it would be the same conditions. I finished some of my software updates, though. I only have 17.5 terabytes left to do. When I finish those you'll need to restart me."

"*Bon*, I understand, you don't have control over that kind of thing. But you see, Jelly, we have a serious problem, and we need you to help us—"

"He doesn't understand shit like that," Raphael objected.

"Maybe he understands more than you think," Mina said. Jelly didn't seem to be very good at understanding himself, but even if he was just a machine, he was a machine that could learn. As his life went on he could get smarter. Maybe he was still growing up, like Raphael and Mina. "Jelly, there are some people who are going to beat up our father. They want money."

"Never put up with bullying," Jelly said. "Tell a grownup. It's not something you have to handle on your own."

"Yes, but our father *is* a grownup, and so are the bullies."

"You could tell a teacher or a police officer. But," tilting his head again in that cute way, "you don't have a teacher, do you?"

"No. And these bullies are soldiers, so the police aren't going to help us."

"I have things I'm allowed to do if the bullying is in progress and there's not time to get help," he said doubtfully.

"Yes, that's exactly the situation," Mina said. "What can you do?"

"I can make a sound like a loud whistle. That can get the attention of a nearby adult. Or I can do the alarm."

"What kind of alarm?"

"Well, the normal one sounds sort of like a car alarm. Usually that works."

Raphael said, "People around here don't have car alarms." Mina didn't even know what it was. "But yeah, I should have thought of that kind of thing. We went through your sounds folder before, right?"

"Like the ultrasonic signals for when you're playing chess?"

"Right, that folder. But this is going to be a sound that we *want* older people to be able to hear. Do you have a siren?"

The trick with the siren didn't work, probably because the soldiers knew that the streets were too narrow for vehicles to pass, but it did turn their attention for a while from abusing *Baba* to finding and then abusing Jelly. They used him as the ball for a

game of cricket, but he kept from being destroyed because none of the soldiers were sober enough to get a hit. The house was an easier target, and they knocked it down. Mina liked to believe that they went away eventually because the family, and a couple of the neighbors, did their best to intervene, or at least stood nearby and exposed themselves to harm. Raphael maintained that the soldiers left because they got sleepy. Even so, it was obvious that Jelly had changed the situation for the better. He was like Raphael: whereas before he'd been an encumbrance, now at least he was a wild card, a useful agent of chaos.

The family took shelter for a while under the bridge where the *Avenue de la République* stepped daintily over the salt evaporation ponds. At first Mina imagined that they would fix the house and move back into it, but they didn't have the right hardware and tools, and they were short on labor, because they had to work to get money for food. *Baba* was in the hospital, and he seemed like he was going to need some time to get better after what the soldiers had done to him. When Raphael tried to get his money turned into paper bills by the machine at the hotel, the S.P.E. company's A.I. agent said in its cheerful sing-songy voice that there was a freeze on his account "for your protection," and he should give a phone number and address to straighten it out. But the family had never had a phone, and as for a street address, it had never even occurred to Mina that a number might be assigned to her family's house, or an official name to the street it stood on.

Once the family was off their house's former parcel, their connection to the property slipped into a confusing kind of tenuity. Nobody seemed clear on the legal arrangements. There was a meeting with the landlady's son, at which it became clear that the landlady had died a while back without their knowing it, and which degenerated into an argument about the quality of the five cases of toilet paper that *Nga* had provided a while back in place of cash. Mina realized finally that she'd been misunderstanding how property worked in the modern world. She'd thought that people—at least rich landlords and rich American people—still owned things, but it was clear from what Jelly and the landlady's son said that really all you ever had these days was a license: a kind of temporary permission to use something, which could evaporate at any time for obscure reasons. Despite all the fancy techno-frills, the way it worked was more like what happened when a toddler screamed *mine!* The toy was only his until he lay down for a nap, and then it went away. Maybe it had always been that way, even long ago when the rich had first become rich and the poor poor. How could anyone have owned anything to start with, unless it was simply because one caveman bonked another on the head and walked off with the prize?

The bridge was drier than the house, and when she came home at night her nose adjusted to the briny smell more quickly than it had to the sewage stink in their old neighborhood. There were only a couple of other families there, so it wasn't even too

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crowded. There wasn't much you could objectively say against the bridge, except that it was a completely unsuitable place to imagine installing a big, soft Japanese chair with foot massage—but still Mina couldn't help feeling that it was a terrible step down in life. Equally illogical were her newly softhearted feelings about *Baba*, finally diagnosed with a damaged spleen. Once when she was bringing him food, she took Jelly along, and when she left the room for a moment and came back, she caught him saying something to the robot that sounded suspiciously like half-remembered endearments from her own childhood. He just looked up sheepishly at her, and she had to smile and stroke his balding head. The hospital cost a vast amount of money, which the billing lady said was really just a token payment compared to what it would have cost if he hadn't been a hardship case. Depending on which doctor they talked to, he might also need surgery.

That was how Mina and Jelly ended up at the Christian school run by the American nuns, sitting in front of the gigantic English dictionary. Between her feet was Raphael's big sack, full of solid-state drives from Alseny's e-waste computers: drives that were encrypted, so that they were useless to Alseny. Light streamed down onto Jelly through a window that had been nearly filled with a cheap plastic facsimile of stained glass, showing the miracle of the loaves and fishes. Television-blue light fell on the top of page 680, CINCTURE to CINQUEFOIL. Jelly, perched on the sill of the dictionary's carved wooden stand, pored over the pages that to him were as big as carpets. If it had been safe to bring him close to an internet hotspot again, he could probably have completed this process in a tenth of a second, but instead they had to spend hour after tedious hour here every morning before work. The nun who kept an eye on the library thought Mina was very studious.

Jelly stirred, and Mina reached out to turn the page for him, but he said, "I think I've got one: CINNAMON123."

"Cinnamon, what's that?"

"*Cannellier de Ceylan*, the spice. It's probably the name of their cat or something."

Mina smiled and shook her head. It still amazed her that so many of the rich foreigners could be so dumb, especially after they got to go to school until they were eighteen or twenty. Why would they go to all the trouble of encrypting their drives, but then choose a password that was basically just a word from the dictionary? No doubt when Jelly got farther through the alphabet he'd get hits like PASSWORD123 and SECRET123.

"Okay, which one?"

"I can find it. Open the bag."

She checked to make sure that the nun wasn't peeking in from the hall, then held the sack open in her lap so that Jelly could go in. His front paws dug like a dog's through the jumble. He had memorized a small part of each drive, like going to a library and memorizing one page out of each book. If he could decrypt the sample using CINNAMON123, he could probably decrypt the whole thing.

"This one," he squeaked from inside the bag, and pointed with his nose. She cabled him up to the drive through the port in his mouth.

He held still for a moment, then nodded and spoke—he could still talk even when his mouth was full. "Yes, that's working. I've got it all decrypted. Emails . . . banking . . ."

Raphael had a new system for handling money, something involving prepaid phone cards and a *hawala* in Cairo. Tomorrow he'd be at the cashier's window in the basement of the hospital with another small pile of ten-k notes.

"Ah, *très bien, mon petit chou*." Jelly came out of the bag, looking proud. Mina stroked his head, and he wiggled his tailless rump and rubbed the side of his stubby little snout against her belly. He knew it, and Mina knew it too: Jelly had been kicked over the threshold. ○

MONKEY DO

Kit Reed

Kit Reed has stories appearing in *Postscripts*, *Kenyon Review*, and several anthologies this year, with a collection coming from PS Publishing in 2011. *Publishers Weekly* praised *Enclave* (2009) as “a gripping dystopian thriller.” Other novels include *The Baby Merchant*, *J. Eden*, and *Thinner Than Thou*, which won an ALA Alex award. A Guggenheim fellow and the first American recipient of a five-year literary grant from the Abraham Woursell Foundation, she is Resident Writer at Wesleyan University. Readers will find a sardonic depiction of an “author” and his “muse” in Kit’s latest tale for us.

Every writer wants to be famous, at least just once. I’ve been at it since before the dog died but it’s an animal planet, so what do you expect? If a hundred monkeys typing for a thousand years would probably produce a novel, what could one monkey do with a computer and the right software?

That is, a computer-literate monkey like Spud.

I never liked the monkey. I brought it home because I was stuck on certain points in my *Monkey Planet* novel and needed a specimen to observe firsthand. In a one-room apartment, gorillas are out of the question and chimps are too annoying to have around. Plus, baboons are evil incarnate, which you’d know if you’d ever looked one in the eye. Ergo, Spud.

He was quiet, he was small enough to fit in a shopping bag if he scrunched, so what could go wrong?

He had bad habits, his breath was vile but I thought, cool. Bestseller at any cost. Instant movie. Fame! I finished the book, OK, I even got paid. I did all the right things to promote it even though they weren’t paying squat. I touched all the miserable bases, up to and including being snubbed at cons and sitting at bookstore tables for hours waiting to sign *Rhesus Planet* for fans who never showed up. Nice poster featuring Spud attracted a few ladies, but they awwwed and moved on.

My novel tanked but the monkey is still around.

It’s not like I wanted to keep the monkey. It sat around scratching its belly and mocking me, and I could swear it was grunting, Failure. I saw pity in its eyes.

You bet I was over Spud. In fact the first thing I did after the book was done was take him back to the pet store for a refund, but the dealer said he didn’t accept returns. I tried to trade him in for an anaconda, but a sarcastic, second-hand rhesus monkey with white eyebrows and a white goatee and white hair on its butt like a second beard around its asshole turns out to be a drug on the market.

So I donated him to the local zoo. They took him on a trial basis. We hugged goodbye. I thought good riddance, but he was back on my doorstep in less than a week.

There was a note attached to his carrier: BAD INFLUENCE. I was embarrassed, but not surprised.

I tried to take him out in the wild and set him free, and he was okay in the car until I turned off the freeway. Stupid jerk, he started to cry. Never mind, I found him a nice field with lots of growing things that he could eat if he wasn't so fussy, a nice pond and trees he could jump around in. God knows I tried to turn him loose. I put him down and gave him a little pat on the butt. "Go, be free!" Instead he locked his arms and legs around my shin and no matter how hard I kicked to shake him off he clung, going ook-ook-ook so pathetically that I picked him up and we went home.

As a result Spud is still around, a constant reminder of whatever is the most recent failure, and believe me, there have been a few too many since *Rhesus Planet*, the unsuccessful *Cockatoo Nation* being one. At least the dealer let me turn in the bird for a goldfish, which mysteriously disappeared the day I brought it home.

Never mind. I did what you do in the wake of failure, which pretty much happens every time I try. I sat down at the computer and started another novel, but when nobody likes you it's hard, thinking up new words to push around the screen.

You get distracted, and the monkey was no help. Spud got bored or jealous or some damn thing whenever I sat down to write. Worse, every time I walked away to get coffee or look out the window for inspiration, which was often, he hopped up on the table and started bopping away at my keyboard with his little fists, bonka-bonka-bonka, and one day when I came back from gazing into the bathroom mirror, I found words.

HELO BILY

Well, he spelled it all wrong, but I'm here to tell you: never condescend to a monkey. It turns out the little fuckers are clever. Plus they are easily bored and idle hands can delete an entire chapter just while you're in the bathroom, examining your zits.

I had to come up with a distraction if I was ever going to finish this rotten book. If I could just get Spud onto something that kept him busy, he wouldn't have to spring up on my keyboard every time I turned my back, like, when I came back to work I wouldn't have to deal with him crouching on top of the bookcase with that reproachful look, ook-ooking every time I quit typing because I was trying to think.

It was inhibiting, all that judgmental hopping and ooking and worse, knowing that he was watching my every move with those sober eyes. I could swear he knew every time I switched screens to see if my Amazon figures had improved or went looking for signs of life on my Facebook page; if I started to blog the ook-ooking slipped into a positively spiteful screeeee.

The monkey was judging me. If I wanted to get anywhere with *Koala Galaxy*, I needed to get Spud the sententious rhesus monkey off my case. Monkey see, monkey do? Fine. I would create a diversion.

I dragged out the laptop Mom bought me when she first found out that I was going to be a famous writer. If it takes a hundred monkeys a thousand years to type a novel and I only had one, how wrong could it go?

I gave my old klunker to the monkey.

Oh, he bonked out a few words but he was no threat to me, for I am an artist. While he was plinking away I managed to crank out *Gibbous Moon*, 3,000,004 on Amazon last time I looked, and *Screaming Meemies*, my first horror novel which, in case you're interested, is in its fifth year on offer, for mysterious reasons, and therefore still available.

And Spud? Oh, he banged out a few hundred words, no big deal, but pretty damn good for a monkey. At least his spelling improved. His little screeds weren't worth squat, but seeing how lame they were compared to my work absolutely cheered me up. I would pat him on the back and praise him and I don't think he knew for a minute that my tone was maybe a little bit condescending, for he is the monkey and I am the pro.

He got good enough that I started printing out some of his stuff and at night, after we'd both eaten and I was sick of playing World of Warcraft and fluffing up my MySpace page, I workshopped the stuff with him, or I tried to. If you want to know the truth, Spud's always been a little too thin-skinned about criticism to be a real writer. One harsh word out of me, one little suggestion and he started ook-ook-ooooking so loud that we had complaints from the neighbors and the super gave me an or-else speech.

"Very well," I said to the monkey finally, and I'm sorry to say that he took it very badly, "if you can't handle a little constructive criticism, shut up or get out of the kitchen."

How was I supposed to know he was so thin-skinned that he would sulk? When I next looked at his laptop screen the ungrateful brute had typed—never mind what he typed, it was insulting and unprintable. I shouted, "language!" but he didn't care.

I told him what he could do with his copy and went back to work, and if the next time I peeked Spud had written a villanelle, well—never mind. "Oook-ook-ook," I said to him after I printed it. "This is what I think of your villanelle." He cried when I tore it to bits and threw the pieces away. At least I think that's what he was doing. I sneaked a peek at his screen, which is how he usually communicates, but it was blank so I never found out what he was thinking.

For the next few days he pretty much abandoned the laptop. Whether I was working or not, he sat in a corner and kept his back to me. He wouldn't eat, at least not while I was watching, and he wouldn't touch the keyboard—plus, every once in a while I could swear I heard him moan, but with monkeys, you never know. He was sulking for sure.

In a way, it was a relief. It was a lot easier to work without him watching. I managed to finish *Dam of the Unconscionable*, my first literary novel. My feeling is, I never sold many copies because I've always been a hybrid and the world resents a literary novelist, but I could gain respect. I thought *Dam of the Unconscionable* would make me famous. I wrote my heart out on that book! It was so intense that I just knew it would win a couple of prizes; this was going to be the novel that would break me out.

Meanwhile Spud was languishing. He wouldn't type, didn't write, wouldn't celebrate with me when a small press gave me a contract for my novel. He wouldn't touch the laptop even though I gave him inspiring speeches about perseverance. Frankly, it was depressing, seeing him dragging around with his shoulders hunched, and I would do anything to buck him up. I even told him he showed promise and slid the open laptop in front of him, hoping to lure him back to his *escritoire*. The ungrateful bastard just sat on the windowsill, looking into his paws. I hate the sober little jerk but that expression made me feel bad for him and a tad bit guilty too, for letting him type away on that laptop with nary an honest or even a hypocritical kind word.

"You're good," I told him, and I tried my best not to sound condescending this time. "You're really good." But he just looked at me the way he did and I knew that he knew.

Then *Dam of the Unconscionable* tanked. The small press wouldn't even give my money back. I brought home the only copy they printed and I shook it in Spud's face. I'm afraid I shouted: "Well, are you happy now?" I could tell he was still sulking. He wouldn't even ook at me.

So for months Spud sat around and brooded; he was shedding, like every clump of fur was a little reproach. Have you ever tried to sit down and get serious about your novel in the presence of a living reproach? It's like typing on the deck of the Ark the day it starts raining in earnest. Everything shorts out.

If I was ever going to finish *Screed of the Outrageous* and get famous, Spud was a problem that had to be solved.

I couldn't get rid of the guy, too much has gone down between us, so I had to make him happy. Whatever it took.

Then inspiration struck. I was surfing—okay, I was mousing along thinking, the way you do when things aren't going well inside your head, and I came upon this amazing product.

I clicked on this page and it said in big letters all the way across the top, **NOVEL WRITING WAS NEVER EASIER**. I thought, oh boy, lead me to it, for if I haven't mentioned it, a writer's life is consummate hell. The ad read:

Create and track your characters.

Invent situations that work.

Consummate climaxes.

Triumph over conclusions.

Pay for our software out of your first royalty check.

Everything you need to be a successful novelist for five hundred dollars.

Naturally I clicked through to find out more about this miracle and on the next opening in Ta-DAAA print I got its name:

Success guaranteed with . . .

STORYGRINDER

Lead me to it, I thought. Of course electronic miracles are not for me, for I am an artist, but given that Mom had just sent me one of her inspiration bonus checks I thought it might be just the thing for Spud. Plus, if I downloaded it for him I could look over the monkey's shoulder and see if **Storygrinder** knew any tricks, like: five hundred dollars, is there anything in that black bag for me?

So I read the fumpf out loud, thinking to get Spud's attention. "Success guaranteed," I read. "Spud, get a load of this. They can show you how to write *Bright Lights, Big City*," I told him, which, unfortunately, didn't get a rise out of him, not so much as an oooook.

Then I said, "Or if you wanted, maybe even the Bible."

Nothing. "Or . . . Or . . ." Then I was inspired. "A book like *Animal Farm*."

Bingo. Spud's head came up.

I thought, if a hundred monkeys typing take a thousand years to write a novel, this software ought to be enough to keep this one off my back for thirty years, which is about as long as these labor-intensive rhesus guys are supposed to last.

I bought **Storygrinder** for the monkey. One look and it was clear the software was not for me. It was, frankly, simplistic. One click and I could write *The Last of the Mohicans*, which, hel-LO, has already been done.

"Here you go, dude," I told him, and on the premise that monkey see, monkey do, I walked him through the first stages.

"It was the best of times, it was the worst of times," I wrote, like Charles Dickens, although the application gave me options that would let me write like one of the Brontës. A flag popped up:

DID YOU MEAN TO REPEAT YOURSELF? FIX.

So I wrote, "Call me Ishmael." Naturally it questioned my spelling, but what the hey, Spud sidled over to watch.

Then I started writing a book that began, "It was love at first sight. The first time Yossarian saw the chaplain he fell madly in love with him," and the monkey's interest in life came back with a jerk.

"Oook!" Spud said and he hurtled in and shoved me out of the way with the force of his entire body. "Oook-ooook!"

"Good boy." Although it would have been fun to play with the software at least a little bit I backed off, relieved and delighted to see him distracted and busy for a change. "Go to it, little dude. Onward," I said, "and upward with the arts."

His eyes lit up.

I said helpfully, "I'd click on the button that says, start my book."

For the first time since I brought him home to my apartment, Spud sounded positively joyful. "Oook!"

It did my heart good to see him pounding away with both fists, and better yet, given the nature of the buttons and whistles attached to this new application, which not only tracks your spelling and punctuation but also tells you when you're depending too heavily on certain verbs or using an adjective like "magnificent" more than once in your whole entire novel, the little bugger is a genius with the mouse.

A month with **Storygrinder** and Spud bounded past the pound-and-click method and into proper keyboarding before I noticed what was up. For the first time since I gave him the laptop he started using his tiny fingers. To my surprise the animal has a stretch that any concert pianist would envy and, man, you ought to see his attack! After a month he was up to speed and the next thing I knew he had outrun me, typing so fast that there was no telling where it would end. Next time I checked his output almost matched mine, and as I was in the final third of my next attempt after *Screed of the Outrageous* and, frankly, my best shot at going for the gold, what I had thought of as a gimmick to keep Spud out of my hair ended up with us in a footrace for fame.

He was hard at it and instead of being relieved by my first weeks of freedom from his constant sulking—to say nothing of the fierce, judgmental attention I got back in the days when I was working well and he was bored—I was proud, but I was also a little bit scared.

The worst part was that where we used to print out every night and talk about what he'd done, now at night when Spud was done for the day he would slam the laptop shut with this don't-even-think-about-it glare. And do you know, he had the thing password-protected? I ask you, who taught him that? Either he was jealous of **Storygrinder** and afraid I'd siphon off a copy and get the jump on him, or he didn't want me finding out what his novel looked like.

What it looked like, it looked like it was a thousand pages long and I had to start wondering whether it was *War and Peace* he was writing, only with rhesus monkeys instead of Russians, or this century's answer to *Gone with the Wind*. Monkeys, you never know, and he wasn't tipping his hand. Naturally I'd started out with this thinking I would keep close tabs on him, of course he'd want me to print out so we could workshop what he was writing the way we did in the good old days, but I'd do it better this time around. Like, more praise for what he was doing, but definitely constructive criticism over cookies and cocoa like we used to do, late at night.

How sharper than a serpent's tooth is the ungrateful protégé. The one time I tried to hook up his laptop to the printer cable, Spud latched on to me like that thing out of *Alien* and plastered his smelly body to my face. I went lunging around blindly with his legs in a stranglehold so tight that I couldn't breathe and his fists clamped on my ears. I had to stagger into the kitchen and duck my head in the dirty dishwater to make him let go. After that I had to make certain promises, like you do when you have to get somebody off your case because they're all up in your face.

I retreated to my corner and he stayed in his forever typing, typing, typing, and when I tried to make things better with a tactful smile or an inoffensive remark—even when I came at him with bananas and candy he would get all defensive and slam the laptop shut with that look. He was what you'd have to call vindictive, so after a while I backed off and tried my best to get back to *Deranged All Over Town* which will rival *Bright Lights, Big City* if I can ever get it back on track which, given what happened with the monkey's novel, gets harder and harder to do.

The little bastard sent it off to an agent without even telling me it was done.

I'd just as soon spare myself the details of what happened next, but since the mon-

key can't open bank accounts or deposit checks not to mention endorsing them convincingly, I've benefited a bit. Prada and Gucci everything, as Spud could care less about outfits and frankly, he's careless about his looks. A specially fitted car seat for our trips to public appearances and book signings, where he has generously allowed me to stand in for him. In fact, as far as the world knows it is I, Billy Masterton (that's the renowned W.B. Masterton, Pulitzer Prize-winning author) who did the deed. The monkey has nothing to complain about. He has his very own room in our Brooklyn townhouse and I bought him three computers loaded with **Storygrinder** in his own special work area that I've fitted out so he can write his miserable, best-selling potboilers three at a time for all I care. Between us, the monkey and I put James Patterson so far behind in the popularity sweepstakes that the man can put his entire staff to work 24/7 and still never catch up on any bestseller list. And if I get the money and the credit?

What Spud doesn't know, he doesn't have to know.

The trouble is, this whole mad success up to and including bestsellerdom, has me working day and night on the little bastard's behalf, which means that since it all hit the fan and sprayed money on us, my cherished *Deranged All Over Town* is advancing at the rate of one line a day, and I'm sad to say the line I finally manage is one I'm so pressured to complete that I don't get time or space in my head to think it through, which means first thing next morning, I have to delete.

Plus, Spud has me answering every single piece of his fan mail, sending thank-yous for those endless and insultingly expensive gifts and maintaining his pages on MySpace, where he has ten thousand friends, and on Facebook, where he has a mere eight thousand, although my carpals are seriously tunneled just from scrolling through the stuff, never mind the hours I spend virtually sitting in front of W.B. Masterton's virtual bookstore on Second Life.

And the monkey? I think he just finished this century's answer to *The Brothers Karamazov*, but with more sex and a lot more guilt. Where does he get off, thinking he knows anything about guilt? He, who smothered my brilliant career like an infant in its crib.

But what's killing me, if you want to know what kills me, is the blog. I don't get to see what the monkey writes until he posts it. I sneak looks at his printed works while I'm waiting for his platoons of fans to flood the auditorium where I am speaking, or for booksellers to unbar the doors to let the next wave of frantic admirers in, but that isn't enough. His work is pretty good, which, frankly, is depressing, but not half as depressing as discovering from one of these gooshy-eyed teenagers or inspired surfer dudes that the son of a bitch has been dissing me on his blog.

If you want to read what Spud says about me, go ahead and read it, you'll find more than you want to know about our relationship plastered in the pages at:

<http://www.wbmastertonauthor.net>

I only looked the once. After everything I've done for Spud, the software and the encouragement and the plush cover for his rotten car seat in the Beemer and the patent leather evening slippers because after he saw mine he wouldn't stop oook-ooking until I had some especially made for him; in spite of me buying him his very own organ grinder the ungrateful little bastard had the nerve to write this very day:

Those of you think I know the way to happiness might as well know that success isn't everything. You may think I am happy because of the American Book Award and all, but as long as I am the prisoner of a shitty writer, happiness is forever and eternally out of reach and if any of you care about me ever, you have to come to my house and GET ME OUT.

That to his eight million hits a day, forwarded to all their friends and acquaintances all over the English-speaking world!

Okay, if that's how it is, that's how it's going to be.

Well, if that's what he thinks of me . . .

I'll show him.

The ape's got four more novels banked in those computers, and even if I can't crack his passwords, he's already raking in so much that it's no skin off my butt if he crashes and bursts into flames, so, cool. I'm fixed for life. I don't want to hurt the monkey, really, and I won't hit him with a bill of particulars. I won't even do the gratifying thing and smash his head in with an axe.

Given the pillow, which I've soaked in chloroform, the little fucker won't feel a thing. ○



HUMAN POTENTIAL

I had a girlfriend who said she could see auras,
lambent fields of energy suffusing every human
all the colors from ruby through ultraviolet

(We all radiate about a hundred watts,
mostly in the infrared.

I doubt she could see it.)

But if
she really could see even a fraction
even a tiniest portion
of the energy inherent in every human,
Einstein's energy
—if we truly could reach our utmost potential—
her inner eye would be
not merely dazzled
but blinded.

—Geoffrey A. Landis

Chris Beckett still lives in Cambridge, England, with his wife, their youngest daughter Nancy, and various animals. His short story collection *The Turing Test*, which includes three stories that first appeared in *Asimov's*, won the Edge Hill Short Fiction award in 2009 (the only national UK award for short story collections). It beat out collections by several successful literary fiction authors—one of them a Booker Prize winner. *The Turing Test* is still available, as are his two US-published novels, *Marcher* and *The Holy Machine*. He has signed a two book deal with Corvus, an imprint of Grove Atlantic, and will shortly be moving to part-time work so that he will have more time for writing. You can check out Chris's new website at www.chris-beckett.com. In his latest story for us, the creator of a simulated reality must wrest his world back from the man who wears . . .

THE PEACOCK CLOAK

Chris Beckett

Up to that moment nothing much had been moving in that mountain valley apart from grasshoppers and bees, and the stream playing peacefully by itself over its stony bed. But then Tawus was there in his famous cloak, its bright fabric still fizzing and sparking from the prodigious leap, its hundred eyes, black, green, and gold, restlessly assaying the scene. Tawus had arrived, and, as always, everything else was dimmed and diminished by his presence.

"This world was well made," Tawus said to himself with his accustomed mixture of jealousy and pride.

He savored the scent of lavender and thyme, the creaking of grasshoppers, the gurgling of the stream.

"Every detail *works*," he said, noticing a fat bumblebee, spattered with yellow pollen, launching herself into flight from a pink cistus flower. Passing the small hard object he carried in his left hand to his right, Tawus stooped to take the flower stem between his left forefinger and thumb. "Every molecule, every speck of dust."

But then, painfully and vividly, and in a way that had not happened for some time, he was reminded of the early days, the beginning, when, on the far side of this universe, he and the Six awoke and found themselves in another garden wilderness ringed, like this one, by mountains.

Back then things had felt very different. Tawus had known what Fabbro knew,

had felt what Fabbro felt. His purposes had been Fabbro's purposes, and all his memories were from Fabbro's world, a world within which the created universe of Esperine was like a child's plaything, a scene carved into an ivory ball (albeit carved so exquisitely that its trees could sway in the wind and lose their leaves in autumn, its creatures live and die). Of course he had known quite well he was a copy of Fabbro and not Fabbro himself, but he was an exact copy, down to the smallest particle, the smallest thought, identical in every way except that he had been rendered in the stuff of Esperine, so that he could inhabit Fabbro's creation on Fabbro's behalf. He was a creation as Esperine was, but he could remember creating himself, just as he could remember creating Esperine, inside the device that Fabbro called Constructive Thought. Back then, Tawus had thought of Fabbro not as "he" and "him" but as "I" and "me."

And how beautiful this world had seemed then, how simple, how unsullied, how full of opportunities, how free of the ties and regrets and complications that had hemmed in the life of Fabbro in the world outside.

Tawus released the pink flower, let it spring back among its hundred bright fellows, and stood up straight, returning the small object from his right hand to his dominant left. Then, with his quick grey eyes, he glanced back down the path, and up at the rocky ridges on either side. The peacock eyes looked with him, sampling every part of the visible and invisible spectrum.

"No, Tawus, you are not observed," whispered the cloak, using the silent code with which it spoke to him through his skin.

"Not observed, perhaps," said Tawus, "but certainly expected."

Now he turned southward, toward the head of the valley, and began to walk. His strides were quick and determined but his thoughts less so. The gentle scents and sounds of the mountain valley continued to stir up troublingly vivid memories from the other end of time. He recalled watching the Six wake up, his three brothers and three sisters. They were also made in the likeness of Fabbro but they were, so to speak, reflections of him in mirrors with curved surfaces or different colored glass, so that they were different from the original and from each other. Tawus remembered their eyes opening—his brother Balthazar first and then his sister Cassandra—and he remembered their spreading smiles as they looked around and simultaneously saw and remembered where they were, in this exquisite, benign, and yet to be explored world, released for ever from the cares and complications of Fabbro's life and from the baleful history of the vast and vacant universe in which Fabbro was born.

They had been strangely shy of each other at first, even though they shared the same memories, the same history, and the same sole parent. The three sisters in particular, in spite of Fabbro's androgynous and protean nature, felt exposed and uneasy in their unfamiliar bodies. But even the men were uncomfortable in their new skins. All seven were trying to decide who they were. It had been a kind of adolescence. All had felt awkward, all had been absurdly optimistic about what they could achieve. They had made a pact with each other, for instance, that they would always work together and take decisions as a group. ("That didn't last," Tawus now wryly observed, and then he remembered, with a momentary excruciating pang, the fate of Cassandra, his proud and stubborn sister.)

Having made their pact, all Seven had stridden out, laughing and talking all at once, under a warm sun not unlike this one, and on a path not unlike the one he was walking now, dressed so splendidly in his Peacock Cloak. He had no such cloak back then. They had been naked gods. They had begun to wrap themselves up only as they moved apart from one another: Cassandra in her Mirror Mantle, Jabreel in his Armor of Light, Balthazar in his Coat of Dreams . . . But the Peacock Cloak had been finest of all.

"I hear music," the cloak now whispered to him.

Tawus stopped and listened. He could hear only the stream, the grasshoppers, and the bees. He shrugged.

"Hospitable of him, to lay on music to greet us."

"Just a peasant flute, a flute and goat bells."

"Probably shepherds up in the hills somewhere," said Tawus, resuming his stride.

He remembered how the seven of them came to their first human village, a village whose hundred simple people imagined that they had always lived there, tending their cattle and their sheep, and had no inkling that only a few hours before, they and their memories had been brought into being all at once by their creator Fabbro within the circuits of Constructive Thought, along with a thousand similar groups scattered over the planets of Esperine: the final touch, the final detail, in the world builder's ivory ball.

"The surprise on their faces!" Tawus murmured to himself, and smiled. "To see these seven tall naked figures striding down through their pastures."

"You are tense," observed his cloak. "You are distracting yourself with thoughts of things elsewhere and long ago."

"So I am," agreed Tawus, in the same silent code. "I am not keen to think about my destination."

He looked down at the object he carried in his hand, smooth and white and intricate, like a polished shell. It was a gun of sorts, a weapon of his own devising. It did not fire bullets but was utterly deadly, for, within a confined area, it was capable of unraveling the laws that defined Esperine itself and, in that way, reducing form to pure chaos.

"Give me a pocket to put this in," Tawus said.

At once the cloak opened itself up to receive the gun, and then sealed itself again when Tawus had withdrawn his hand.

"The cloak can aim and shoot for me, in any case," Tawus said to himself.

And the cloak's eyes winked, green and gold and black.

The valley turned a corner. There was an outcrop of harder rock. As he came round it, Tawus heard the music that his cloak, with its finely tuned senses, had detected some way back: a fluted melody, inexpertly played, and an arrhythmic jangling of crudely made bells. Up ahead of him three young children were minding a flock of sheep and goats, sheltering by a little patch of trees at a spot where a tributary brook cascaded into the main stream. A girl of nine or ten was playing panpipes. In front of her on a large stone, as if in the two-seat auditorium of a miniature theater, two smaller children sat side by side: a boy of five or so and a little girl of three, cradling a lamb that lay across both their laps. The jangling bells hung from the necks of the grazing beasts. Seeing Tawus, the girl laid down her pipes and the two smaller children hastily set their lamb on the ground, stood up, and moved quickly to stand on each side of their sister with their hands in hers. All three stared at Tawus with wide unsmiling eyes. And then, as he drew near, they ran forward and kissed his hand, first the older girl, then the boy, and finally the little three-year-old whose baby lips left a cool patch of moistness on his skin.

"Your face is familiar to them," the cloak silently observed. "They think they know you from before."

"As we might predict," said Tawus. "But *you* they have never seen."

The children were astounded by a fabric on which the patterns were in constant motion, and by the animated peacock eyes. The smallest child reached out a grubby finger to touch the magical cloth.

"No, Thomas!" her sister scolded, slapping the child's hand away. "Leave the gentleman's coat alone."

"No harm," Tawus said gruffly, patting the tiny girl on the head.

And the cloak shook off the fragments of snot and dust that the child's fingers had left behind.

Ten minutes later Tawus turned and looked back at them. They were little more than dots in the mountain landscape but he could see that they were still watching him, still standing and holding hands. Around them, unheeded, the sheep grazed with the goats.

Suddenly, Tawus was vividly reminded of three other children he had once seen, about the same ages as these. He had hardly given them a thought at the time, but now he vividly remembered them: the younger two huddled against their sister, all three staring with white faces as Tawus and his army rolled through their burning village, their home in ruins behind them. It had been in a flat watery country called Meadow Lee. From his vantage point in the turret of a tank, Tawus could see its verdant water meadows stretching away for miles. Across the whole expanse of it were burning buildings and columns of dirty smoke that were gradually staining the wide blue sky a glowering oily yellow.

When was that, Tawus wondered? On which of the several different occasions when fighting had come to Meadow Lee? He thought it had been during one of his early wars against his brother Balthazar. But then he wondered whether perhaps it had been at a later stage when he was in an alliance with Balthazar against Jibreel?

"Neither," said the Peacock Cloak. "It was in the war all six of you waged against Cassandra, that time she banned chrome extraction in her lands."

"Don't needlessly interfere. Offer guidance where necessary, head off obvious problems, but otherwise allow things to take their own course."

It would be wrong to say these were Fabbro's *instructions* to the Seven, because he had never spoken to them. They were simply his intentions, which he had written down in his journal and which they all knew because his memories were replicated in their own minds. When they encountered those first villagers, the Seven had greeted them, requested food and a place to rest that night, and asked if there were any matters they could assist with. They did not try to impose their views, or change the villagers' minds about how the world worked or how to live their lives. That had all come later, along with the wars and the empires.

"But did he really think we could go on like that forever?" Tawus now angrily asked. "What were we supposed to *do* all this time? Just wander around indefinitely, advising on a sore throat here, suggesting crop rotation there, but otherwise doing nothing with this world at all?"

The Seven had begun to be different from Fabbro the moment they awoke. And paradoxically it was Tawus, the one most completely alike to Fabbro, who had moved most quickly away from Fabbro's wishes.

"We can't just be gardeners of this world," he had told his brothers and sisters, after they had visited a dozen sleepy villages, "we can't just be shepherds of its people, watching them while they graze. We will go mad. We will turn into demented imbeciles. We need to be able to build things, play with technology, unlock the possibilities that we know exist within this particular reality frame. We will need metals and fuels, and a society complex enough to extract and refine them. We will need ways of storing and transmitting information. There will need to be cities. On at least one planet, in at least one continent, we will have to organize a state."

The Six had all had reservations at first, to different degrees, and for slightly different reasons.

"Just give me a small territory then," Tawus had said, "a patch of land with some people in it, to experiment and develop my ideas."

In his own little fiefdom he had adopted a new approach, not simply advising, but tempting and cajoling. He had made little labor-saving devices for his people and then spoken to them of machines that would do all their work for them. He had helped them make boats and then described space ships that would make them masters of the stars. He had sown dissatisfaction in their minds and, within two years, he had achieved government, schools, metallurgy, sea-faring, and a militia. Seeing what he had achieved, the Six had fallen over one another to catch up.

"How come they all followed me, if my path was so wrong?" Tawus now asked.

"They had no choice but to follow you," observed the Peacock Cloak, "if they didn't wish to be altogether eclipsed."

"Which is another way of saying that my way was in the end inevitable, because once it is chosen, all other ways become obsolete. To have obeyed Fabbro would simply have been to postpone what was sooner or later going to happen, if not led by me, then by one of the others, or even by some leader rising up from the Esperine people themselves."

He thought briefly again of the children in front of the ruined house, but then he turned another corner, and there was his destination ahead of him. It was a little island of domesticity amidst the benign wilderness of the valley, a small cottage with a garden and an orchard and a front gate, standing beside a lake.

"He is outside," said the Peacock Cloak, whose hundred eyes could see through many different kinds of obstacle. "He is down beside the water."

Tawus came to the cottage gate. It was very quiet. He could hear the bees going back and forth from the wild thyme flowers, the splash of a duck alighting on the lake, the clapping of a wooden wind chime in an almond tree.

He raised his hand to the latch, then lowered it again.

"What's the matter with me? Why hesitate?"

Clop clop went the wind chimes.

"It is always better to act," whispered the cloak through his skin, "that's what you asked me to remind you."

Its peacock eyes glanced eagerly this way and that.

Tawus nodded. It *was* always better to act than to waste time agonizing. It was by acting that he had built a civilization, summoned great cities into being, driven through the technological changes that had taken this world from sleepy rural Arcadia to interplanetary empire. It was by acting that he had prevailed over his six siblings, even when all six were ranged against him, for each one of them had been encumbered by Fabbro with gifts or traits of character more specialized than his own pure strength of will: mercy, imagination, doubt, ambivalence, detachment, humility.

True, he had caused much destruction and misery but, after all, to act at all it was necessary to be willing to destroy. If he ever had a moment of doubt, he simply reminded himself that you couldn't take a single step without running the risk of crushing some small creeping thing, too small to be seen, going about its blameless life. You couldn't breathe without the possibility of sucking in some tiny innocent from the air.

"The city of X is refusing to accept our authority," his generals would say.

"Then raze it to the ground as we warned we would," he would answer without a moment's thought.

And the hundred eyes would dart this way and that, like a scouting party sent out ahead of the battalions that were his own thoughts, looking for opportunities in the new situation that he had created, scoping out his next move and the move after that.

There had been times when his generals had stood there open-mouthed, astound-

ed by his ruthlessness. But they did not question him. They knew it was the strength of his will that made him great, made him something more than they were.

"But now," he said to himself bitterly, "I seem to be having difficulty making up my mind about a garden gate."

"Just act," said the cloak, rippling against his skin in a way that was almost like laughter.

Tawus smiled. He would act on his own account and not on instructions from his clothes, but all the same he lifted his hand to the latch and this time opened it. He was moving forward again. And the eyes on his cloak shone in readiness.

Inside the gate the path branched three ways: right to the cottage, with the peaks of the valley's western ridge behind it, straight ahead to the little orchard and vegetable garden, left and eastward down to the small lake from which flowed the stream that he'd been following. On the far side of the lake was the ridge of peaks that formed the valley's eastern edge. Some sheep were grazing on their slopes.

Clop clop went the wind chimes, and a bee zipped by his ear like a tiny racing car on a track.

Tawus looked down toward the lake.

"There you are," he murmured, spotting the small figure at the water's edge that the peacock eyes had already located, sitting on a log on a little beach, looking through binoculars at the various ducks and water birds out on the lake.

"You know I'm here," Tawus muttered angrily. "You know quite well I'm here."

"Indeed he does," the cloak confirmed. "The tension in his shoulders is unmistakable."

"He just wants to make me the one that speaks first," Tawus said.

So he did not speak. Instead, when there were only a few meters between them, he stooped, picked up a stone and lobbed it into the water over the seated figure's head.

The ripples spread out over the lake. Among some reeds at the far end of the little beach, a duck gave a low warning quack to its fellows. The man on the log turned round.

"Tawus," he exclaimed, laying down his field glasses and rising to his feet with a broad smile of welcome, "Tawus, my dear fellow. It's been a very long time."

The likeness between the two of them would have been instantly apparent to any observer, even from a distance. They had the same lithe and balletic bearing, the same high cheekbones and aquiline nose, the same thick mane of grey hair. But the man by the water was simply dressed in a white shirt and white breeches, while Tawus still wore his magnificent cloak with its shifting patterns and its restless eyes. And Tawus stood stiffly while the other man, still smiling, extended his arms, as if he expected Tawus to fall into his embrace.

Tawus did not move or bend.

"You've put it about that you're Fabbro himself," he said, "or so I've heard."

The other man nodded.

"Well, yes. Of course there's a sense in which I am a copy of Fabbro as you are, since this body is an analogue of the body that Fabbro was born with, rather than the body itself. But the original Fabbro ceased to exist when I came into being, so my history and his have never branched away from each another, as yours and his did, but are arranged sequentially in a single line, a single story. So yes, I'm Fabbro. All that is left of Fabbro is me, and I have finally entered my own creation. It seemed fitting, now that both Esperine and I are coming to a close."

Tawus considered this for a moment. He had an impulse to ask about the world beyond Esperine, that vast and ancient universe in which Fabbro had been born and grown up. For of course Fabbro's was the only childhood that Tawus could remember, Fabbro's the only youth. He was naturally curious to know how things had changed

out there and to hear news of the people from Fabbro's past: friends, collaborators, male and female lovers, children (actual biological children, that is: children of Fabbro's body and not just his mind).

"Isn't all that a distraction?" the cloak asked him through his skin. "Isn't it his worry and not yours?"

Tawus nodded.

"Yes, and it muddies the water," he silently agreed. "It confuses the issue of worlds and their ownership."

He looked Fabbro in the face.

"You had no business coming into Esperine," he told him. "We renounced your world and you in turn gave this world to us to be our own. You've no right to come barging back in here now, interfering, undermining my authority, undermining the authority of the Five."

(It was Five now, not Six, because of Cassandra's annihilation in the Chrome Wars.)

Fabbro smiled.

"Some might say you'd undermined each other's authority quite well without my help, with your constant warring, and your famines and your plagues and all of that."

"That's a matter for us, not you."

"Possibly so," said Fabbro. "Possibly so. But in my defense, I have tried to keep out of the way since I arrived in this world."

"You let it be known you were here, though. That was enough."

Fabbro tipped his head from side to side, weighing this up.

"Enough? Do you really think so? Surely for my mere presence to have had an impact, there would have had to be something in Esperine that could be touched by it. There had to be a me-shaped hole, if you see what I mean. Otherwise wouldn't I just be some harmless old man up in the mountains?"

He sat down on the log again

"Come and sit with me, Tawus." He patted a space beside him. "This is my favorite spot, my grandstand seat. There's always something happening here. Day. Night. Evening. Morning. Sun. Rain. Always something new to see."

"If you're content with sheep and ducks," said Tawus, and did not sit.

Fabbro watched him. After a few seconds, he smiled.

"That's quite a coat you've got there," he observed.

Many of the peacock eyes turned toward him, questioningly. Others glanced with renewed vigor in every other direction, as if suspecting diversionary tactics.

"I've heard," Fabbro went on, "that it can protect you, make you invisible, change your appearance, allow you to leap from planet to planet without going through the space in between. I've been told that it can tell you of dangers, and draw your attention to things you might wish to know, and even give you counsel, as perhaps it's doing now. That is some coat!"

"He is seeking to rile you," the cloak silently whispered. "You asked me to warn you if he did this."

"Don't patronize me, Fabbro," Tawus said, "I am your copy, not your child. You know that to construct this cloak I simply needed to understand the algorithm on which Esperine is founded, and you know that I do understand it every bit as well as you do."

Fabbro nodded.

"Yes of course. I'm just struck by the different ways in which we've used that understanding. I used it to make a more benign world than my own, within which countless lives could for a limited time unfold and savor their existence. You used it to set yourself apart from the rest of this creation, insulate yourself, wrap yourself up in your own little world of one."

"I could easily have made another complete world as you did, as perfect as Esperine in every way. But any world that I made would necessarily exist within this reality frame, your frame, and therefore still be a part of Esperine, even if its equal or its superior in design. Do you really wonder that I chose instead to find a way of setting myself apart?"

Fabbro did not answer. He gave a half-shrug, then looked out at the lake.

"I've not come here to apologize," Tawus said. "I hope you know that. I have no regrets about my rebellion."

Fabbro turned toward him.

"Oh, don't worry, I know why you came. You came to destroy me. And of course it is possible to destroy me now that I'm here in Esperine, just as it was possible for you and the others to destroy your sister Cassandra when she tried to place a brake on your ambitions. In order to achieve her destruction you found a way of temporarily modifying that part of the original algorithm that protected the seven of you from physical harm. I assume you have a weapon with you now that works in the same way. I guess it's hidden somewhere in that cloak."

"But knowing it doesn't help him," whispered the cloak through Tawus's skin.

Another duck had alighted on the water, smaller and differently colored to the ones that were already there. (It had black wings and a russet head.) Fabbro picked up his binoculars and briefly observed it, before laying them down again, and turning once more to his recalcitrant creation.

"Be that as it may," he said, "I certainly wasn't led to expect an apology. They told me the six of you set out in this direction armed to the teeth and in a great fury. You had a formidable space fleet with you, they said, and huge armies at your back. They told me that cloak of yours was fairly fizzing and sparking with pent-up energy. They said that it turned all the air around you into a giant lens, so that you were greatly magnified and seemed to your followers to be a colossus blazing with fire, striding out in front of them as they poured through the interplanetary gates."

Tawus snatched a stone up from the beach and flung it out over the water.

"You are allowing yourself to be riled," warned the Peacock Cloak through his skin. "But remember that he has no more power than you. In fact he has far less. Thanks to your foresight in creating me, you are the one who is protected, not him. And, unlike him, you are armed."

Tawus turned to face Fabbro.

"You set us inside this world," he said, "then turned away and left us to it. And that was fine, that was the understanding from the beginning. That was your choice and ours. But now, when it suits you because you are growing old, you come wandering in to criticize what we have achieved. What right do you have to do that, Fabbro? You were absent when the hard decisions were being made. How can you know that you would have done anything different yourself?"

"When have I criticized you? When have I claimed I would have done something different?" Fabbro gave a short laugh. "Think, Tawus, think. Stop indulging your anger and think for a moment about the situation we are in. How *could* I say that I would have done something different? What meaning could such a claim possibly have when you and I were one and the same person at the beginning of all this?"

"We began as one person, but we are not one person now. Origins are not everything."

Fabbro looked down at his hands, large and long-fingered as Tawus's were.

"No," he said, "I agree. It must be so. Otherwise there would only ever be one thing."

"You made your choice," Tawus said. "You should have stuck to it and stayed outside."

"Hence the armies, hence the striding like a colossus at their head, hence the plan to seek me out and destroy me?"

Fabbro looked up at Tawus with an expression that was half a frown and half a smile.

"Yes," Tawus said. "Hence all those things."

Fabbro nodded.

"But where are the armies now?" he asked. "Where is the striding colossus? Where is this 'we' of whom you speak? An awful lot of the energy has dissipated, has it not? The nearer you got to me, the faster it all fell away. They've all come back to me, you know, your armies, your brothers, your sisters. They have all come to me and asked to become part of me once again."

Some of the eyes on the cloak glanced inquiringly upward at Tawus's face, others remained fixed on Fabbro, who had lifted his binoculars and was once again looking at bird life out on the lake.

"Fire the gun and you will *be* Fabbro," the Peacock Cloak told its master. "*You* will be the one to whom the armies and the Five have all returned. Your apparent isolation, your apparent diminishment, is simply an artifact of there being two of you here, two rival versions of the original Fabbro. But you are the one I shield and not him. You are the one with the weapon."

Fabbro laid down his field glasses and turned toward the man who still stood stiffly apart from him.

"Come, Tawus," he coaxed gently, patting the surface of the log beside him. "Come and sit down. I won't bite, I promise. It's almost the end, after all. Surely we're both too old, and it's too late in the day, for us to be playing this game?"

Tawus picked up another stone and flung it out into the lake. The ripples spread over the smooth surface. *Quack quack* went the ducks near to where it fell, and one of them fluttered its wings and half-flew a few yards further off, scrabbling at the surface with its feet.

"The armies are irrelevant," Tawus said. "The Five are irrelevant. You know that. For these purposes they are simply fields of force twisting and turning between you and me. The important thing is not that they have come back to you. No. The important thing is that I have not."

Fabbro watched his face and did not speak

"I made their world for them," Tawus went on, beginning to pace restlessly up and down. "I gave them progress. I gave them freedom. I gave them gave cities and nations. I gave them hope. I gave them something to believe in and somewhere to go. You just made a shell. You made a clockwork toy. It was me, through my rebellion, that turned it into a world. Why else did they all follow me?"

He looked around for another stone, found a particularly big one, and lobbed it out even further across the lake. It sent a whole flock of ducks squawking into the air.

"Please sit down, Tawus. I would really like you to sit with me."

Tawus did not respond. Fabbro shrugged and looked away.

"Why exactly *do* you think they followed you?" he asked after a short time.

"Because I was in your image but I wasn't you," Tawus answered at once. "I was like you, but at the same time I was one of them. Because I stood up for this world as a world in its own right, belonging to those who lived in it, and not simply as a plaything of yours."

Fabbro nodded.

"Which was what I wanted you to do," he said.

The day was moving into evening. The eastern ridge of peaks across the water glowed gold from the sun that was setting opposite them to the west.

"After the sun sets," Fabbro calmly said, "the world will end. Everyone has come back to me. It's time that you and I brought things to a close."

Tawus was caught off guard. So little time. It seemed he had miscalculated the

timescale somewhat, not having the benefit of the Olympian view that Fabbro had enjoyed until recently, looking in from outside of Constructive Thought. He had not appreciated that the end was quite as close as it was.

But he was not going to show his surprise.

"I suppose you are going to lecture me," he said, "about the widows and orphans of my wars."

As he spoke he was gathering up stones from the beach, hastily, almost urgently, as if they had some vital purpose.

"I suppose you're going to go on about all the children whose parents I took from them," he said.

He threw a stone. *Splash. Quack.*

"And the rapes that all sides perpetrated," he said, throwing a stone again, "and the tortures," throwing yet another stone, "and the massacres."

He had run out of stones. He turned angrily toward Fabbro.

"I suppose you want to castigate me for turning skilled farmers and hunters and fishermen into passive workers in dreary city streets, spending their days manufacturing things they didn't understand, and their evenings staring at images on screens manufactured for them by someone else."

He turned away, shaking his head, looking around vaguely for more stones.

"I used to think about you looking in from outside," he said. "When we had wars, when we were industrializing and getting people off the land, all of those difficult times. I used to imagine you judging me, clucking your tongue, shaking your head. But *you* try and bring progress to a world without any adverse consequences for anyone. You just try it."

"Come on, Tawus," Fabbro begged him. "Sit with me. You know you're not really going to destroy me. You know you can't really reverse the course that this world, like any world, must take. It isn't only your armies that have fallen away from you, Tawus, it is your own steely will. It has no purpose any more."

But the cloak offered another point of view.

"Destroy Fabbro and you will become him," it silently whispered. "Then you can put back the clock itself."

Tawus knew it was true. Without Fabbro to stop him, he could indeed postpone the end, not forever, but for several more generations. And he could rule Esperine during that time as he had never ruled before, with no Fabbro outside, no one to look in and judge him. The cloak was right. He would *become* Fabbro, he would become Fabbro and Tawus both at once. It was possible, and what was more, it had been his reason for coming here in the first place.

He glanced down at Fabbro. He looked quickly away again across the lake. Ten whole seconds passed.

Then Tawus reached slowly for the clasp of the Peacock Cloak. He hesitated. He lowered his hand. He reached for the clasp again. His fingers were trembling because of the contradictory signals they were receiving from his brain, but finally he unfastened the cloak, removing it slowly and deliberately at first, and then suddenly flinging it away from him, as if he feared it might grab hold and refuse to let him go. It snagged on a branch of a small oak tree and hung there, one corner touching the stony ground. Still its clever eyes darted about, green and gold and black. It was watching Tawus, watching Fabbro. As ever, it was observing everything, analyzing everything, evaluating options and possibilities. But yet, as is surely proper in a garment hanging from a tree, it had no direction of its own, it had no purpose.

Across the lake, the eastern hills shone. There were sheep up there grazing, bathed in golden light that picked them out against the mountainside. But the hills on the western side were also making their presence felt, for their shadows were reaching

out like long fingers over the two small figures by the lake, one standing, one seated on the log, neither one speaking. Without his cloak, in a simple white shirt and white breeches, Tawus looked even more like Fabbro. A stranger could not have told them apart.

A flock of geese came flying in from a day of grazing lower down the valley. They honked peaceably to one another as they splashed down on the softly luminous water.

"When I was walking up here," Tawus said at last, "I met three children, and they reminded me of some other children I saw once, or glimpsed anyway, when I was riding past in a tank. It was in the middle of a war and I didn't pay much heed to them at the time. I was too busy listening to reports and giving orders. But for some reason they stuck in my mind."

He picked up a stone, tossed it half-heartedly out into the lake.

"Their ruined home lay behind them," he went on, "and in the ruins, most probably, lay the burnt corpses of their parents. Not that their parents would have been combatants or anything. It was just that their country, their sleepy land of Meadow Lee, had temporarily become the square on the chessboard that the great game was focused on, the place where the force fields happened to intersect. Pretty soon the focal point would be somewhere else and the armies would move on from Meadow Lee and forget all about it until the next time. But those children wouldn't forget, would they? Not while they still lived. This day would stain and darken their entire lives, like the smoke darkened and stained their pretty blue sky. What could be worse, when you think about it, than filling up a small mind with such horrors? That, in a way, is also creating a world. It is creating a small but perfect hell."

He snatched up yet another stone, but, with a swift graceful movement, Fabbro had jumped up and grasped Tawus's wrist to stop him throwing it.

"Enough, Tawus, enough. The rebellion is over. The divisions you brought about have all been healed. The killed and the killers. The tortured and the torturers. The enslaved and the enslavers. All are reconciled. All have finally come back."

"Everyone but me."

Tawus let the stone fall to the ground. His creator released his hand, sat down again on the log and once again patted the space beside him.

Tawus looked at Fabbro, and at the log, and back at Fabbro again. And, finally, he sat down.

The two of them were completely in shadow now, had become shadows themselves. The smooth surface of the lake still glowed with soft pinks and blues, but the many birds on its surface had become shadows too, warm living shadows, softly murmuring to one another in their various watery tongues, suspended between the glowing lake and the glowing sky. And more shadow was spreading up the hillside opposite, engulfing the sheep one after another, taking them from golden prominence to peaceful obscurity. Soon only the peaks still dipped into the stream of sunlight that was pouring horizontally far above the heads of the two men.

"Everyone but you," Fabbro mildly agreed, reaching down for his binoculars once more so he could look at some unusual duck or other that he'd noticed out on the water.

Tawus glanced across at his Peacock Cloak, dangling from its tree with the gun still hidden in its pocket. That tawdry thing, he suddenly thought. Why did I choose to hide myself in that? The cloak was shimmering and glittering, giving off its own light in the shadow, and its eyes were still brightly shining, as if it was attempting to be a rival to those last brilliant rays of sunlight, or to outglow the softly glowing lake. It was all that was left of Tawus's empire, his will, his power.

He turned to Fabbro.

"Don't get the wrong idea," he began. "I don't in any way regret what . . ."

Then he broke off. He passed his still trembling hand over his face.

"I'm sorry, Fabbro," he said in a completely different voice. "I've messed it all up, haven't I? I've been a fool. I've spoiled everything."

Fabbro lowered his binoculars and patted Tawus on the hand.

"Well, maybe you have. I'm not sure. But you're quite right, you know, that I *did* just create a shell, and it *was* your rebellion that made it a world. Deep down I always knew that rebellion was necessary. I must have done, mustn't I, since whatever you did came from somewhere inside me? Rebellion was necessary. I'd just hoped that in Esperine it would somehow have taken a different path."

Only the highest tips of the peaks were still shining gold. They were like bright orange light bulbs. And then, one by one, they went out. ○

CRUSHED

Here's some advice: Never fall in love with a black hole.

Oh, sure, a black hole really knows how to warp the space-time continuum.

And the magnitude of its gravitational pull is absolutely irresistible, one might even say charming in certain circles.

But once you cross the event horizon, (truly that point of no return) the tidal forces rip you apart.

There's no escaping the singularity no matter how hard you struggle.

And if you think you're the only one to be sucked into its vortex, think again.

A black hole has this effect on all celestial bodies in the vicinity.

And then some.

Right.

So, what's a celestial body to do?

Because whether you submit or resist, either way, you're crushed.

—Susan Abel Sullivan



Peter Friend has been published in numerous magazines and anthologies around the world. He's also a filmmaker and artist, and bakes great muffins. In real life, he's a computer analyst, but hopes to one day become a full-time living art treasure. The author of one of the strangest holiday stories we've ever run, "The Christmas Tree" (December 2004), returns to our pages to tell the equally alien tale of a . . .

VOYAGE TO THE MOON

Peter Friend

"We were informed you were ill, Professor Thithiwith," said Majesty, sounding disappointed that I could crawl across the palace floor unaided.

"Indeed so, Majesty," I agreed, for it was never wise to contradict Her or Her informers. "Old age and my arthritic rear limbs have much restricted my astronomical duties of late, although my esteemed colleague Professor Tlik has been most generous in his assistance. And of course I am much restored by Your kind concern."

Several of Her heads glared at me, as if suspecting sarcasm. "And yet We are further informed," She continued, "that despite your illness, you have been keenly tending a grotesquely overripe house pod in the Observatory gardens."

I forced a delighted chuckle. "Forgive me, Majesty, I had foolishly thought to surprise You. I should have known You would divine my true plans in an instant."

She surely had no idea what I was talking about. I was gambling on Her vanity, and Her love of surprises—pleasant surprises, that is.

Her bodies rolled closer together and Her heads whispered to each other.

"It would please Us if you would recite the full details for the enlightenment of Our subjects," She said.

"Your entire Queendom joyously prepares for the bicentennial of Your hatching, Majesty, each of us striving to show our devoted . . . er, devotion."

One of Her heads stifled a small yawn.

"So a year ago," I continued hurriedly, "I began my own humble project—to bring You a petal of the moon."

I had the entire court's attention now. Professor Tlik—my loathsome deputy and the bane of my academic life—raised his head in astonishment from amidst a cluster of courtiers. No doubt he was only here to gloat at my expected downfall.

Sure enough, the stunned silence was broken by his spluttering. "Superstitious nonsense, Majesty. Observations proved a hundred years ago that the moon is almost certainly not a giant flower. Professor Thithiwith is quite unfit to be Royal Astronomer if—"

"We did not ask you to speak, Tlik," snapped Majesty, then turned to me. "And We asked you for the *full* details, Professor Thithiwith. How do you propose to obtain

this fabulous petal for Us? Will you . . . fly up and pluck it?" She smiled, triggering a wave of sycophantic titters around the room.

"Again You have outthought me, Majesty," I exclaimed. "Yes, the pod is now of sufficient buoyancy to support the weight of myself and my equipment. I propose to pilot it through the heavens to the moon and back, taking scientific observations and samples as I go. Therefore my dear colleague Professor Tlik is quite correct—I will be unable to fulfill the duties of Royal Astronomer, and hereby resign in his favor."

I bowed my head to the floor and awaited my fate. Would a royal guard drive a spike through my neck at Her signal? Would Tlik remain sufficiently dazzled by his sudden promotion to keep his mouth shut? I stole a glance in his direction. His jaws were twitching, but he was watching Majesty. As were the rest of the court.

"We are touched by your devotion," She said at last, and I dared to breathe again. "Yet We are also concerned by such . . . recklessness . . . in both of you. Professor Thithiwith, your voyage has Our blessing. Professor Tlik, you will accompany Professor Thithiwith as his assistant. You may both now copulate with Us." The air filled with Her intoxicating musk, and two of Her bodies swiveled their abdomens in our directions.

She was a most subtle monarch, I thought, glaring at Tlik as we ecstatically thrust our seed glands into Her. There was no greater privilege than to pass one's genes back to the Royal Line; not one in a thousand were ever so privileged. I barely noticed the pain as Her abdominal claws severed my seed gland. But alas, surely this honor was proof that She expected neither of us to return from the voyage.

Majesty's blessing was not entirely beneficial. I no longer feared sabotage, for a small grim troop of royal guards now kept watch on the pod, which I had patriotically christened the *Majestic Glory*. But I woke each morning in dread that overnight it might have burst, wilted, or escaped its bindings.

Most of my time was now spent caring for the *Glory*, and fending off Tlik's half-hearted assistance and the observatory staff.

"Have you forgotten our ancestors' wisdom?" demanded Chakthil, a respected but senile elder astronomer. "Surely you cannot believe this talk of flying flowers? The divine Revelations of Snii are clear—the moon is the young fire goddess Gwilka, forever chasing her elder sun sister Gwolk through the sky. To approach them would be heresy, and quite possibly cause the universe to implode."

"No, no, noble Gwilka rides upon the great moon flower, and will surely bless any scholarly visitors to her realm," insisted Pilkrit, his even older colleague.

Tlik snorted. "The sun and moon are giant shining pods, blindly following routes decreed by mathematical logic," he declared, yet again boring all in earshot with his secular mechanist nonsense. "The flowers are mere metaphors, a sop for uneducated folk." (Such as Majesty Herself, although he did not dare say so aloud.)

I could not let such an insult to our faith and traditions go unchallenged. "As any rational person can see, a moon flower is tossed each night across the sky by great Shuloku, the Queen of Heaven. At the bidding of our glorious Majesty at the center of the universe, of course," I hurriedly added.

"How smart is it, Professor Thithiwith?" asked a voice, a few days before our scheduled launch.

I looked down from atop the *Glory* where I was rubbing yinkle oil onto a lateral vine, and saw an apprentice astronomer—Pren, was that his name?—behind the glowering guards. I had noticed him lurking on numerous occasions—one of Majesty's spies, I had assumed. His question surprised me.

"Pod intelligence? What an odd notion, boy," I said, keeping my tone casual.

"I know pods, sir," Pren insisted. "I grew up on a farm. Even the smallest wild pod has the sense to turn its spine membranes to the sun, and to roll in search of water, and knows when to rise into the sky and burst to spread its seed. And bigger pods are smarter, especially house pods. I've seen them roll over smaller pods to block their sun, or strangle another's vines to take over a nice moist patch of dirt. They grow more cunning with age. And so I wondered, sir, how intelligent is the *Glory*?"

"Come up here, boy. Guards, let him through," I ordered.

To my relief, they obeyed. Pren scuttled up the *Glory*'s vines in an instant, reminding me painfully of my age.

"You have discovered our secret," I said in a low voice, watching his face. "Yes, the *Glory* is an excellent conversationalist and each evening joins me in singing Majesty's praises. If not for this voyage, I would have appointed it my deputy astronomer, for it has more wit and charm than Tlik."

Pren grinned nervously, and glanced down as if checking the guards were out of earshot. "Surely you jest, sir. Even this fine pod is as blind, deaf and mute as its lesser brethren. Forgive me, but I have observed you in my spare moments each day—you stroke the *Glory*'s spines, and I see them move under your touch. I can only presume your intention to be navigation, sir. You cannot drift through the sky at the aimless mercy of the winds; the *Glory* must be set to face its correct heading, as if it were a sailer-pod upon the waves."

"Remarkable," I said. "You are the first to deduce that; the Queendom's leading botanists and astronomers have noticed nothing more than an oversized pod. So, boy, do you think it will work?"

"Yes, sir. The *Glory* is a most ingenious craft, and the voyage will be a great adventure. I beg you, may I join your crew?"

"Crew? What crew? I do not even want Tlik onboard, he will only get in the way."

"I mean no disrespect to Professor Tlik, sir, but that's precisely why you need me. Your . . . maturity has brought great wisdom, but also . . . well, sir, neither of you are as strong or agile as you once were."

"I will consider it," I sighed, knowing he was right.

Majesty sent two of Her bodies to personally observe our launch—an unheard-of honor. Her more fashionable and energetic courtiers accompanied Her, as did the entire Royal Observatory staff.

To my surprise, most of the crown city's population also crowded the nearby streets to watch us clamber up into the *Glory*'s woven net of vines. I took a small ocular from our equipment case and peered at the crowd suspiciously.

"They are gambling on us," I spluttered.

"Most expect the pod to explode and for us to fall to our deaths before their eyes," said Pren cheerfully. "So I have sold everything I own, and wagered the proceeds that we shall return safely. The dividends were most generous; I will be rich."

I said nothing, took a pruning hook and began cutting the lower vines that attached the *Glory* to the ground. Pren sighed and joined in with his own hook.

"Yes, yes, your logic is most admirable, boy, *if* we return," muttered Tlik, tightly clutching vines with all his limbs. "Well, Thithiwith, tell us honestly, shall this ridiculous pod of yours really take us to the moon?"

"I sincerely hope so," I said, and slashed the final vine.

The *Glory* heaved upwards into the air. I heard a shrill whistling and feared we had already sprung a leak, only to realize that the noise came from the excited crowd below us. Perhaps to them we were just an amusing spectacle, but I was more concerned at our erratic spinning and lurching. The *Glory*, as new to flying as we were,

was flapping its spines wildly—perhaps natural behavior for a feral pod, but hardly conducive to our comfort or safety.

I climbed the vines to the spine clusters and stroked their twitching flesh. As hoped, the *Glory* recognized my touch, and the twitching diminished, as did our wild swaying.

The crowd noise faded and was replaced by gentle creaking and thrumming from the *Glory* above us. I peered down and to my astonishment saw the entire crown city laid out far below.

"We are still alive, which is more than I had expected," sniffed Tlik. "Congratulations, Thithiwith. We are now higher than anyone in recorded history, and may each rate a graciously worded grave brick in the walls of Majesty's next palace."

"Is the *Glory* well?" asked Pren, looking up at me. "Can you navigate, sir?"

"We will soon find out." I stroked the nearest spine, and to my relief, it obediently stretched just as when on the ground. I guessed at the wind, sighted the sun, and slowly nudged the *Glory* Fallwards.

Tlik seemed happy consulting a huge collection of maps and comparing them with the view below, occasionally chortling as he discovered some inaccuracy and annotated a map in red ink.

I kept Pren busy rubbing yinkle oil into the *Glory's* skin—he understood as well as I that its supple skin was all that differentiated it from an ordinary house pod's dry brittle shell. But I bade him keep well clear of the spines.

"Look, sirs," he cried, pointing down. "The borders of the Queendom! The whole country is in our view, from the Kraaf Mountains to the Tiroon Sea. But . . . with all respect, sirs, I must say that the barbarian wastes beyond our borders look much the same as our own lands. I see farmland and roads and cities."

"Of course, boy, use your brain," I said. "There are Queendoms in all directions, each little different to our own, and each with a Queen convinced that She alone rules the civilized world."

Pren looked shocked.

Tlik snorted. "Have you never asked yourself how we know the sky is a perfect hemisphere, boy? Trigonometry. Long before you were born, astronomers of a dozen Queendoms secretly collaborated on measurements to prove it. Any one Queendom is too small to allow enough observation points for accurate calculations."

"But sirs, then this voyage is of even greater importance. Imagine how flocks of flying pods will now revolutionize science, cartography, trade, allowing us—"

"Allowing what?" shouted Tlik. "Flying armies dropping rocks on neighboring Queendoms at the command of jealous Queens, that shall be the only outcome if we succeed. Use your brain, indeed. *This irrational fool*"—he pointed at me—"has not used his brain, has not considered the consequences for a moment!"

Speechless, I gaped at him. "My apologies, Professor Tlik. You are correct, we must ensure this voyage is not . . . too successful. Perhaps . . . perhaps we might arrange a quiet crash landing for our return, near some village in the Kraaf Mountains. Then again, fate has not yet decided to let us return at all."

Tlik nodded curtly, and went back to his maps. Pren silently rubbed yinkle oil onto the *Glory*.

"Is that a cloud?" asked Pren, some hours later.

I turned and saw that what at first appeared to be an ordinary cloud was in truth a writhing mass of thousands, perhaps millions of white tentacles.

"How can such a creature float through the air?" Pren wondered.

"Some equivalent of pod gas, no doubt," said Tlik, sketching energetically. His artistic skills were excellent, I had to admit.

I peered through the ocular as we neared the cloud's height. "Actually, it appears not to be floating at all," I said. "It looks more as if it is . . . crawling upside down. But on what?"

The question answered itself with a soft thud as we lurched to a halt. Around us were nothing but sky and clouds. I climbed the *Glory* for a better view, only to hit my head as I neared its top. I reached up and touched solid blue.

"We have hit the sky," I yelled, scarcely believing it myself.

"Nonsense," said Tlik and began clambering up to join me.

He was overtaken by nimble Pren. "The edge of the universe," he said in wonder.

"Nonsense," repeated Tlik, only to hit his own head on the blue surface.

"What else can it be?" I asked. "Perhaps the ancients were right and the universe itself is a giant pod, and our sky its inner shell. Although I recall no mention of cloud animals crawling upon it."

Tlik tapped the sky dubiously several times as if hoping to disprove me, but could offer no better explanation himself. "I am unimpressed by your navigation," he muttered at last.

"As am I," I confessed. "But with no means to measure our speed or height, and the ground a mere blur even through the ocular, we can trust only our eyes and wits. Is that a line I see in the distance?"

I passed the ocular to Pren, and he confirmed he too could see a faint line far across the sky. As it seemed to take us near the path of the slowly approaching sun, the line seemed a sensible destination, even to Tlik.

At first I feared we might be trapped against the sky, for we had no means to lower the *Glory*, but some experimentation and flapping of spines soon nudged us into a lower breeze that blew gently Fallwards.

"We have accidentally collected some sky creatures," reported Pren, holding a handful of pulsing blue bubbles.

"Take care that they do not feed upon pods or us," I warned, seeing great swarms of the same bubbles crawling across the sky above our heads.

"Apparently not," said Pren. "I suspect they are food for the clouds."

"Both clouds and bubbles avoid those black flowers, and I propose we do likewise," said Tlik.

The wind blew us near one of the "flowers." Whether they were gigantic dead blossoms as they appeared, I knew not, but Tlik was right, they were given a wide berth by all creatures, and I was relieved we came no nearer.

The line in the sky grew closer, but no less mysterious. It was an enormous ridged groove square-cut into the sky, perhaps twice as deep and wide as the *Glory*, and the same perfect blue as the rest of the sky. A gust of wind blew us up into the groove, giving us an uncomfortably close look.

"Could it be the trail of some stupendous creature?" wondered Tlik.

"Yes," I said. "The sun."

"Ridiculous. Why would the sun leave such a path?" sneered Tlik, but he could see as well as I that *why* was not the point, for the sun undeniably approached along the groove.

Perhaps the *Glory* somehow sensed the impending danger, for it bucked and spun and flapped its spines to no good effect. It calmed a little when Pren joined me in rubbing its spines—had he learnt to do so from watching me?—but we remained trapped.

"We have only one chance." I pulled out a pruning hook and prepared to cut a small hole in the *Glory*.

"You are mad, Thithiwith!" yelled Tlik, trying to grab the hook from me, while Pren restrained us both.

The sun bore down on us with a strange grinding and rattling noise, its heat already harsh on our faces and further agitating the *Glory*. But before I could again attempt to puncture the pod, we were hit by a wave of hot air from the sun's wake and tossed out of the groove and across the sky.

"The holy sun spared our lives!" Tlik squealed. "Our eternal thanks, Shuloku, Queen of Heaven!"

Was he mocking me? "All right, Tlik, I was wrong, I admit it. Yes, the sun is a machine, a clanking monstrosity of more metal than exists in our entire Queendom, but a machine nonetheless. Our whole world is clearly artificial, just as you mechanists insist."

"Idiot," he shouted back. "I was wrong. Such a miraculous creation can only be the work of a goddess—what more proof could you need?"

"Cloud," shrieked Pren. I looked up, only to see the top of the *Glory* vanish under a layer of white tentacles. No, not tentacles at all—I saw now they were in fact an uncountable swarm of individual worm-like creatures.

I thought us doomed, but the pod seemed unconcerned by the cloud's attentions.

"Another miracle," declared Tlik.

"The cloud is eating the bubble creatures," said Pren. "But it seems to have no taste for pod flesh." To my horror, he calmly held out a forelimb to a questing white worm, and was briefly investigated, then ignored. "Or ours."

"Truly we are blessed by the Queen of Heaven," said Tlik.

"Truly we are stuck," I said. "The *Glory's* vines are tangled in the worms."

We waited, but the cloud showed no sign of releasing us or moving away. Perhaps it was digesting its last meal of bubbles; perhaps it slumbered.

We passed the time arguing, Tlik scorning my newly mechanist views and I deriding his new theosophical zeal. Pren pointedly ignored us both.

The sun continued its slow traverse Fallwards along the groove, and the sky began to darken. At last the sun disappeared at Fall, and at Rise at the other end of the world, we saw the moon emerge. The stars appeared one at a time, glowing with a cold light.

"The black flowers," I said, pointing. "They have awoken as stars."

Having nothing better to do, we bickered over why the stars now glowed. Our cloud also showed interest, its worms waving at the nearest star.

I must have nodded off. I jerked to attention and saw the moon noisily passing us, grinding and rattling along the groove just as the sun had done.

"Another great machine," I observed.

"Another divine artifact," said Tlik.

That would have started another argument, except that our cloud chose to then casually split in two, releasing us at last. One cloudlet hesitantly approached a nearby twinkling star.

Before we could celebrate our freedom, the star lashed out with long tendrils, and we were surrounded by blindly fleeing cloud worms. The *Glory* lurched and I saw it too had been struck by a tendril. We were slowly dragged towards the flowerlike mouth along with thousands of worms.

"Foul creature!" shouted Tlik. "How dare you interrupt our observation of the divine moon?" With surprising speed, he climbed a vine and slashed at the tendril with a pruning hook. After a couple of blows, he bellowed in triumph as the tendril parted, but more tendrils lashed at us, one catching both the *Glory* and Tlik himself in its sticky grasp. "Begone, I say," he yelled, slashing wildly, but this time succeeded too well, severing the new tendril's grasp on the pod but not on himself, and he was drawn screaming and shouting into the star's mouth.

Perhaps he was not entirely to the star's taste, or perhaps it merely whipped blindly at anything nearby—for whatever reason, no more tendrils hit us, and we left the star gorging on worms and one Royal Assistant Astronomer.

"He was a fine scientist and a credit to the observatory," I said shakily, astonished at finding myself close to tears. "Keenly intelligent, although obstinate, self-absorbed, illogical at times, a terrible waffler—"

"Yes, and we apprentices say exactly the same about you," snapped Pren. "Sir."

I had no reply to that.

"We must complete our mission," I said at last. "Tlik would have wanted it."

"Agreed, but what is our real mission?" asked Pren. "You never believed in moon petals, did you?"

I glared at him. "We are scientists, and have a moral duty beyond pleasing any Queen or our own petty theories. We are here to observe the heavens and we shall do so. To the moon!"

"Yes, sir."

The star's tendrils had done some minor damage to the *Glory's* skin, and Pren claimed he could feel a slow leak, but even so we made good time chasing the moon, helped by the prevailing Fallwards wind. Pren proved he was an excellent pod handler; I really should have trained him in navigation earlier.

We drew and made notes as best we could. As far as we could tell, the moon was similar to the sun in every way but brightness, which certainly made our observations easier but helped our understanding not at all. What manner of creature or goddess could build such machines and send them rolling through our sky?

We neared Fall and saw just below us the gaping hole where the sun disappeared and the approaching moon would soon follow. Crosswinds and eddies buffeted us as we floated above where ground met sky.

I leant out, looking for some suitable mooring point. "A question for you, Pren. If the world is truly a perfect spherical pod, and I have seen nothing to contradict that, then what is on the underside of the hemisphere we occupy? Another world, perhaps?"

"No."

"No?"

"No, sir, we will not follow the moon down that hole."

"That is not your decision, boy. Think of your duty to science."

"Sir, what use are our observations if we cannot return to share them? Tlik will have died in vain."

I snorted. "What use would those fools at the observatory make of our discoveries? Half would ignore us or call us liars; the other half would write learned books full of misquotations to rot forgotten on library shelves. No, pure knowledge is its own reward." I climbed down a vine and tied its end to a sturdy wild pod root. The vine came loose and I looked up to see Pren had slashed its other end with his pruning hook.

"I apologize, sir," he said tearfully, as the *Glory* bobbed up out of my reach. "But I must respectfully and forcefully disagree. Pure knowledge is not enough, I have a duty to share it with the world. The *Glory* is injured and leaking and I know not whether it will bear me home, but I must try. You and Tlik will be remembered and honored, sir. Goodbye."

"Good luck, Pren," I called. "I mean it. Remember to take Majesty a moon petal—something big and shiny, no one will know the difference. Perhaps you will be Royal Astronomer one day. Perhaps then you will understand."

The moon approached. I waited at the edge of the Fall hole as it slowly rumbled past. When I judged the moment right, I leapt onboard, and sank into darkness. ○

OF LYCANTHROPY AND LILACS

In March the howling through the lilacs
was nearly unendurable.

I looked outside but couldn't see the source.
Buds swelled and the fur on the pussy willows
near the fence line was warm to the touch.

In April the rangy smell of life
assailed my nostrils. Yellow-eyed
crocuses appeared and old burrs
clawed at my socks as I walked
the fields south of the house.

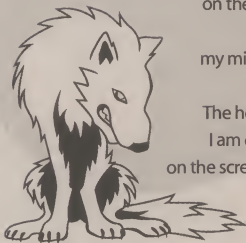
The deer are avoiding my yard this year;
Perhaps the new fence can wait.

Mid-April when I tilled the beds,
the smell of the earth made my heart race,
and potato sets regarded me with clear-eyed,
knowing looks as I planted them in hills.

"Mind your own business," I said,
and when the lilac leaves were tiny ears,
I caressed their tips secretly, listening, listening.
Yesterday, when I finished the planting, I saw
how the lilac buds hung heavy, near bursting
on the twigs. In the night I heard scratching
at my window as I tossed and turned,
my mind alive, my joints aching from effort.

It is May, the air is heavy with pollen.
The hot animal breath of spring engulfs me.
I am old. The moon is full. Tonight I'll sleep
on the screen porch and wait for what will come.

—Sandra Lindow



DREADNOUGHT NEPTUNE

Anna Tambour

Anna Tambour tells us she lives in a valley in Australia that is “sometimes too popular with yee-hawing helicopterists.”

Recent publications to include her stories are *Andromeda Spaceways Inflight Magazine*, and the anthologies *Lovecraft Unbound*, *Paper Cities*, *Sky Whales and Other Wonders*, *Interfictions*, and *The Del Rey Book of Science Fiction and Fantasy*. Her first tale for us is a deceptively gentle Bradburyesque story that takes a bittersweet look at a man’s desperate attempt to share the wonders of his imagination with his young son.

Molecules of Old Spice, bundt cake, hot wool, sauerkraut, machine oil, beaver dusted with snow, and of unadorned excitement melded and rose to the ceiling of the round-shouldered compartment, only to swirl silently back upon the masses. Translucent windows turned into mirrors as night fell, brightened the surgical light within.

“Dreadnought Neptune,” Eugene Thomas said, just loud enough.

His father Jules stifled a shiver of guilt. *I should have stopped, bought him a candy bar or those Red Hots he likes.*

Oh yeah, you big sap? And why didn’t you run home for his toothbrush? Like everyone here, they came as they were, carrying what they had. *It’s hard on a young boy.*

He bent his neck down, examined the naked, tender place on his son’s head where the whirl exposed soft white. *Myself at his age? Eat?* His heart bumped. He heard it. *They’re so much younger than we were.*

“Dreadnought Neptune,” Eugene repeated. Jules regarded him soberly. The boy was speaking to himself. *He doesn’t feel it. Undeveloped?*

“Hm,” said Eugene. “Hm hm hm.”

“Hm,” Jules chuckled. *Quit your Agnessing.*

He would have liked to take out his handkerchief and mop his head, take off his hat—but his elbows were pinned by the crowd. “Crowd” doesn’t quite describe the people packed into the little metal craft. “Crush” was more like it.

The Thomases had been lucky. When Jules lowered his son from his shoulders and stepped into the portway, he glanced back at the writhing snake of a crowd, the end blurred by scuffles loud as a barroom brawl.

An hour it had been since then, Jules estimated. He didn’t have a watch at the

moment, his habit of overwinding being a "trial on the family." *The past.* He shoved that niggle out of his mind. *Six hours is nothing of a wait, for this.*

Inside here now, the heat—tremendous—*only to be expected.* A faint whirr stirred the air, but with perhaps seventy people standing in a space little larger than a broom closet, and everyone dressed like polar bears, it being February, sweat slicked every face.

There were a few families here, but no babies. Two boys' high voices rose at times, like two wasps, but they were an exception. Mostly, there was so much silence that the few remarks people made to each other cut into only the cottony muffle of over-dressed people breathing.

A little growl, and then a muffled pop sounded next to Jules, and then the pop's smell wafted up.

Eugene looked up at his father, mortified.

Jules cringed inwardly, but only for a moment. "The price we pay, son," he whispered. "Too little time to rig up suits." Could a suit have been rigged? he thought.

"You mean?"

"We'll be there in a jiff," Jules said. "And we'll fill up that gas tank," he joked, as he always had when Eugene's stomach let it be known that the boy needed food. But Jules curled his shoulders inward, awaiting the outraged yell, or a punch in the kidneys.

At Jules' reassurance, Eugene's digestion lost all modesty, erupting loudly and more aromatically than that first gentle waft. But oddly enough, a few other digestions replied, and then people began, in little jerks and blusters, to talk to each other. Jules looked around and just in time, grabbed his lower lip in his teeth. This was no bridge night or church social. *This is not the time to break the social ice,* let alone let loose with a lotta fool talk. He dropped his eyes. *Live these momentous moments. Listen to the future as it becomes the now, so unknown, and yet so familiar.*

Eugene smiled up at him, and his heart jumped with pain. *My smile at the same age. My son. My stars, and the cow jumping over the moon.* Eugene and me, riding the cow together. And rockets soaring and comets flying across the skies, their tresses snapping in the eyes of the galaxy watchers, daring all who dare to fly across the face of the heavens.

Jules gazed at his son and his own years dropped away. He felt that electric, incurably impatient joy of being seven again. His eyes stung with awkward tears that he couldn't wipe away, but just then maturity stepped in, smearing the smile on his face, crooked as a blind man's peanut butter sandwich. Eugene is me at seven all right, with—nothing to blame the boy for—a dash of Agnes.

He squeezed his son's hand. *Nobody else needed,* he thought powerfully just then, in a way that he hadn't before. *No one complaining, warning, hesitating, nagging, questioning. No Agnessing.*

The flurry of socializing died down, everyone nursing their own thoughts.

Jules was reminded of all the vegetables—spinach, rutabaga, broccoli—Agnes made his son eat. *It's worth the trip just to get away from broccoli.* The smell in the compartment was now thick enough to slice, but amazingly, there was no complaining, no whining at the crush; not like there'd be, say, waiting for a picture show, *which just goes to show,* Jules nodded, *what even a boy's capable of when he hops into his dream and is only waiting for Opportunity to stomp on the gas.*

A cough cut the air, a couple of sighs and a grunt, and then there was silence again. Eugene lifted his face to Jules and earned a reassuring wink, and boy and father played a game of silent squeeze-rhythm, their clasped hands riffing jazz tunes, syncopating time, while time slipped along in front of Jules' dreamy eyes; but to Eugene, didn't pass.

* * *

"How long more d'you think it'll be?" Eugene asked.

"Can't tell, son." Jules considered that it might be hours yet, perhaps timed by an aural emanation, a Neptunian countdown now being received somewhere in the shiny works, the bug-shaped silver-shimmering craft warming up its tubes to leave. Listening, he could hear a faint wheezing.

"In its own good time, that I know," he reassured his son.

"Here, liddle boy," a big man beside Jules said. He pushed a small package into Jules' free hand. "For your son," the man smiled. "Brought id in case dere's any brats, bud dere ain't. He's a nice boy, so's he mighd as well ab a chew."

"We're much obliged," Jules said, passing the packet to Eugene's sweaty grasp.

"Gee, thanks!" said the boy. "I wonder if it'll still have taste when we land."

"The name's Thomas," said Jules.

"Jodes. Jay oh ed ee ess."

Jules was momentarily sickened by the harsh pink smell of bubble gum layered over everything else.

"Dond mean do be nosy," Jones said. "Bud dond you hab a wife or sum'n back home?"

Jules' face contorted momentarily, then smoothed. "Visiting her mother."

"Sorry," Jones said.

Eugene twisted around so he could look up at Jones. "I'm not, Mister Jones. What mom would let me go on this?"

Sure enough, the few women here didn't look like they possessed a glove between them, nor a wish to have a nice day at home away from unhealthy excitement, nor—from the moment she spotted this ship—did any of these women look like she would remember if she *had* a little boy.

"Why're you here?" Jules Thomas asked.

"All year climad control. No crowds."

"You mean that's not one doozy of a cold?" Jules asked, "And crowds?"

"Wish id were. Adenoids. And corns."

"Sorry to hear." Jules shuffled his feet so that there was no chance of stepping on the man's toes.

"Graed nambe, ain'd id?" Jones commented.

Jules had been thinking almost that very thought, and found himself faintly annoyed to have it brought up by this unhealthy character with the big red nose.

Perhaps his son felt the same, for just then, Jules felt his hand squeezed. He just wanted to be left alone to live to the full this once-in-a-lifetime experience: the Waiting Period Before Embarkation.

Plenty of people might think they had the guts to do it, and the number of people trying to get in was in the hundreds. But in a city as big as Chicago, it was still a lot less than the turnout for a ball game, or the crowd that rubbernecked the Hula Hoop Derby that made Page One of the *Tribune*. Sure, you had to have sticktoitiveness to wiggle your way to Hula Stardom, but after it's over, what's it add up to? A fancy banana split and a night of bad-dream indigestion.

But this! *This ain't no ball game*, Jules said to himself, feeling so free, he talked to himself like that coarse man would, the one with the adenoids. Everyone had just dropped their life fast as a handful of hot tar. *Pile in! Take off! So long, Earth!* Jules laughed to himself, thinking of front pages to come.

The day had boded well. Taking Eugene to the toyshop on Saturday afternoon had been Jules' plan all week. The rocket kit in the window was something they would have to take out of town to fire off, but then that would be yet another day of excitement.

It was when they turned the corner of Elm Street the block before the toyshop that they saw the shiny bug-shaped vehicle. It didn't have recognizable wheels—just a shimmer down below.

"What the—" Jules mumbled.

"It's the Dreadnought Neptune, Mister Thomas!" a splotchy boy said, running away from the thing toward the Thomases. "I've got to tell the folks."

Jules grabbed, but the gangling boy slipped through easy as a drop of mercury. "No time!"

Jules took Eugene's dry hand in his clammy paw and ran two steps—like dragging a fire hydrant.

"Dad. Dreadnought Neptune?"

"The ship to take us, Eugene. There's no time. You heard George."

He jerked Eugene loose and they ran, him a shambling of short legs and heavy coat, the boy skittering but no longer a drag.

"That proves it," Jules said. There, in the midst of the human ants swarming by the entrance to the craft, was old Mr. Schlumpfer, without his hat. With George gone and Mr. Schlumpfer there by the craft, there was no one left at the toy store on Saturday afternoon, its busiest time of the week.

"It's the Dreadnought Neptune, all right." He knelt and put his hand on his son's seven-year-old shoulders.

"Want to rocket, son?"

Eugene's face at that moment reminded Jules so much of his own, inside and out.

"There won't be any trees there?" Eugene asked.

"Hard to tell."

Eugene picked a scab off his knuckle and ate it. "I suppose it depends on what they've prepared for us."

Jules looked at Eugene and thought that he had not considered that far. His son was just that little bit different. Suddenly Jules could not think of a grown man he would want more as a companion.

"Guess we'll find out what they've prepared—"

"When we find out," Eugene finished—the end to a favorite bedtime story—when the boy was two.

Jules was shaken, he didn't know why. *So what?* "There's no time, you know," he said, maybe a bit portentously.

"George said," Eugene said.

"And Mom?" Jules kept himself still, slowed his words. "There's no time for her. We don't have to go."

Eugene's eyes were so steady that for a moment, it seemed as if he couldn't blink. "No," he said.

Jules swept Eugene up onto his shoulders and pushed their way into the front of the most crowded mass of men and boys. Mr. Schlumpfer was working his way to the door at a remarkable rate for a little old man. Jules was just wondering how, when he saw a man jerk away from Schlumpfer with a little cry. Well, well! And here I thought they were party tricks. He wished he had thought to carry such a party trick for eventualities. Gently but ever so insistently, he pushed a smaller man to the side.

Eugene wiggled. "Hello, Mr. Schlumpfer!" His feet beat a tattoo on Jules' chest. "Mister Schlumpfer's coming, too!" but the old man was busy.

"Steady, first mate!" Jules ordered. "We'll meet him on the other side."

READERS: If you are having problems finding *Asimov's Science Fiction* at your favorite retailer, we want to help. First let the store manager know that you want the store to carry *Asimov's*. Then send us a letter or postcard telling us the full name and address of the store (with street name and number, if possible). Write to us at: *Asimov's Science Fiction*, Dept. NS, 6 Prowitt St., Norwalk, CT 06855-1220. Thank you!

All around, "Dreadnought Neptune" were the only words you could hear distinctly, but those words positively hummed.

In his pockets, Jules carried five dollars and fifty cents, a half-full pouch of tobacco, a comfortably battered briar pipe, a half-full box of matches, and a power-ten loupe. He suddenly wished he had brought his nail clipper.

Now, when it must be at least six PM, just as Jules' knees were beginning to say *There's no place like home*, Eugene squeezed his hand. Jules had thought Eugene had been sleeping against him, standing up, but maybe not, because the boy's voice had an edge to it.

"Dad," he whined. "Did you see any sign that said 'Dreadnought Neptune'?"

"No, Eugene," Jules said, surprised to hear the snappishness in his voice.

"Can you hear that pounding, Dad?"

"Yes, Genie." Jules was careful to modulate his voice. It *was* a long wait for these soft boys of today. "But don't you remember? People have been pounding the outside to get in almost since the doors closed."

"I saw id," Jones said, now awake. He had spent the past interminably long time snoring against Jules' shoulder.

"What?" Eugene asked.

"The name."

"See?" Jules craned his neck to smile down at his son, then turned to Jones. "I was too busy getting us through the crowd."

"Dee ded," Jones said.

Eugene giggled. "What?"

Jones looked like he was having second thoughts about the boy. "Indishuls," he snapped.

"Initials, Eugene," Jules chided. "Dee En. Be sharp."

"But Dad!"

"Hmmm?" Jules growled.

"I'm not smart alecking." The boy's eyes glittered. "Dee En could stand for anything. Did you see the name?"

"No, son, but George—"

"And Mister Schlumpfer." Eugene interrupted. "I know."

The "I know" sounded just like Agnes. Jules wished he could slam the door to his study and light his pipe. "Yes, Eugene," he managed to squeeze out from between his teeth. "So?"

"And us, Dad. We're here."

"And me," Jones added.

"And me," said a man none of them could see, but it sounded like close behind.

As if a switch was flicked, the low decibel level of conversation, mumbles, and grumbles suddenly increased, and began to spike.

"Deadbeat nincompoops!" yelled a teenage boy.

"Dratted nonesuchers," an Englishman drawled.

Laughter broke out, amidst a flurry of deep-voiced, but stoic grumbles.

"Taking its own sweet time taking off, isn't it?"

"Least that proves this train ain't run by Mussolini!"

The guffaws shook the craft so much that a high-pitched voice needed to add a two-finger-in-the-mouth whistle to be heard:

"There's something scratched here!"

"Give him room," a deeper voice commanded. "He's got to bend."

The crowd scrunched till heads and shoulders looked awfully mixed up.

"Deadlock Neptunium!" a reedy voice rang out.

"Neptunium, neptunium. What the hell?"

"Is it Russian?"

"Don't be crackers!"

"Did he say Communist?"

"Shud! Up!" boomed a voice that sounded experienced, or maybe just fed up with the wait.

A moment of silence pervaded the atmosphere. And then a laugh that made Jules' hair creep.

"It's elementary, Watson," chuckled the laughter with a polyester-English accent.

"Nep-Tun-ium—" a woman's voice rang out, as if everyone should have known.

"The first synthetic transuranium element of the actinide series discovered," said the man who'd done the stogy Holmes bit, in a weary tone that didn't sound convincing. "The isotope was produced by McMillan and Abelson—"

"—in 1940 at Berkeley, California," the woman who'd said Nep-Tun-ium cut in.

"—as the result of bombarding uranium with cyclotron-produced neutrons," the man finished in a flurry so fast that he sounded, this time, pure American. And then he drawled, "Hi, Maud."

"Hi, Frank. What you doing here?"

"Here?"

"Of course not here. Chicago."

"A different nest."

"A fine nest you've made for yourself," Maud laughed, meanly.

"Speak for yourself, Maud. Netherby stole your work, too?"

"Excuse my French," an older man interrupted. "But hell if we care about your Netherby. Cut us in to your know, why don't you?"

"I'm afraid, young man," drawled Frank, now in his world-weary "English" voice, and there was a quick shuffle and the sound of a punch.

At that, the crowd erupted in recriminations till a piercing whistle stopped the noise. "Quiet, please!" screamed the reedy voice again. "There's a big fat button here, by this panel. And it's got something scratched on it."

"Let him look! Get back!" the most authoritative voice commanded, and everyone crunched again.

Outside, the Chicago wind howled through the city, but the human banging on the outside of the craft had stopped hours ago. Inside now, only the faint breathing of the air mover could be heard.

"It's crude," the reedy voice announced, and people craned their necks to see the speaker, a thin-haired youth with a neck like a wrung chicken. "And it looks like it was scrawled real fast. But yes. It's an eff. A capital eff."

"Whad's that mean?"

"Press it!"

"No! Don't!"

And a whole lot of other things, screamed at the same time, till no one could hear what anyone said, till one woman's voice soared above all the tumult, and it was Maud's. "Just open the damn door!"

At that, the crowd pressed forward toward the door, but either there was no way to find the opening mechanism, or the wild panic that ensued when it didn't open directly caused too many people to shove against each other, and then slip on the shiny floor, and they became bodies that were trampled anyhow, as others stepped on them and stroked the walls, trying to find a latch, anything that stuck out, and there wasn't any, and the walls grew wet with sweat, and more people fell, and there was so much punching and yelling and unholy high screaming, you couldn't hear a thing.

In two uncountable minutes, half the people were dead in a pile, and Mr. Schlumpfer

lay against the opposite wall, his face poking out of his coat like a potato out of a burst sack—and as grey.

When the door finally opened, half the rest of them killed the others in the rush out.

Few of the living ever questioned how the door opened, or cared to mention their participation in the incident, and it is a shame that experiments as fruitful as this have been besmirched by so-called ethical considerations.

The inventiveness and bravery of Maud Pickett and Franklin Hoffstedder in undertaking this psychological study have never been fully appreciated, except by Professor Eugene Thomas, who followed Pickett out the back way as soon as she disappeared, leading his father, who in trying to wrench his son toward the door everyone was pressing toward was himself crushed to death almost, and would have been if Eugene had lost his grip.

Without discussing it between them, Jules and his son came to an agreement. Agnes, Eugene's mother, Jules' wife, never got the goods on the story of what happened to Jules' coat (and his right arm, strained at the shoulder) the night her son and husband were gone till way past a boy's bedtime, let alone a husband's duty to home. And Jules refrained from saying anything to back up Agnes' insistence that Eugene eat an even larger load of vegetables every year he lived at home. Eugene would eat his reeking pile of greens in silence, his face letting on nothing of his thoughts, his disgust, while his mother regarded him with consummate pride. Her other friends had sons they couldn't control, one who, when his mother found him pouring his glass of milk into the aspidistra, gave in to his hatred of milk and stopped making him drink his allotted dose. Agnes roiled at that lack, enjoyed a well-earned gloat. Her son wouldn't end up as a delinquent, uncared for, unguided.

As Eugene ate, she smiled at her plate. It wouldn't do to smile at him, giving him the sin of pride.

And as Eugene ate his spinach, Jules, his father, also hid his smile. He knew, though it would make Agnes unbearable to live with, that he owed his life to spinach.

And when Eugene moved to California to be an important scientist, Jules spent his days waiting for the hours when he was let out of the apartment for some errand, when he'd roam the streets, looking. Never to anyone, not even to the memory of Mr. Schlumpfer, would he have said for what. Certainly not to Agnes—nor, to his everlasting regret, to Eugene, his once-so-promising son. For the older Eugene grew, and the greater Eugene grew, what Jules saw was something he tried so hard not to think about, but he had to just accept. Eugene's strength was his weakness. His solid mind, that lack of imagination, that willingness to succumb to the hard cold dull-eyed fact, to grasp an explanation, that addiction to the real. It *hurt* Jules. Hurt him in the stomach, like eating a cold, hot-mustard slathered sausage.

Yes, Eugene turned into a brilliant scientist. Everybody said so. But with too much Agnes, he would never see Neptune, never feel the comet's tail snapping in his face as he rides that cow over that big old so-close moon. Always be himself, weighty as an encyclopedia, stodgy as mashed potatoes.

One day, Jules thought as he turned the key in the apartment door and said, "I'm home, dear. I had to go to 59th Street" (or "48th Street," or "Park Avenue," or "the third hardware store I tried"), "sweet, to get a fitting for the lamp." (Or "the replacement" or whatever the errand was for, and sometimes he forgot and got in quite a stink of trouble.) One day, he thought especially at that time when he missed Eugene the most, and remembered just how the boy's hand felt in his when they were riffing their jazz, waiting for the shining moment—the lurch of takeoff!—If, when I turn a corner and see another spaceship parked and waiting, I'll have to board alone. ○

NEXT ISSUE

JULY ISSUE

Our July issue features a sprawling new novella by reader favorite **Robert Reed**—and it's sprawling in both size and the reach of its far-future extrapolation. In "A History of Terraforming" Reed examines the multi-multi-generational journey of some very long-lived humans and their valiant (and sometimes catastrophic and nefarious) schemes to make our Solar System a more habitable place. Along the way, we follow an earnest scientist, Simon, on his journey through some of the most inhospitable environments we know today, suddenly made positively Edenic. This story goes from Mars to Saturn's moon Iapetus, to far, far beyond: this is one trip you won't want to skip.

ALSO IN JULY

The venerable **Tom Purdom** returns with the taut and suspenseful "Haggle Chips" wherein an urbane and dashing merchant is held captive against his will in the midst of a bitter border dispute between two intractable societies; newcomer **D.T. Mitenko** submits the funny (though a little scary, too) story of "Eddie's Ants"—they're not ants at all, but a clever, unkillable alien hivemind living amongst the unwitting humans of a college campus. And what can you do when an alien ant farm starts dating your ex? **Kristine Kathryn Rusch** also pursues the lighter side of alien relations with her indispensable guide to intergalactic cruise tourism, "Amelia Pillar's Etiquette for the Space Traveler," an invaluable resource for those who've yet to get their "space legs"; acclaimed new talent **Aliette de Bodard** returns with her second piece for us, the dramatic and historically dizzying, "The Jaguar House, in Shadow," that describes a fascinating alternate future in which the Aztec culture remained ascendent in the south; and **Alice Sola Kim**, making her *Asimov's* debut, deftly explores the trials and travails of a young woman who must contend with psychically transmitted messages from *somewhere*, courtesy of "The Other Graces."

OUR EXCITING FEATURES

Robert Silverberg's Reflections joins the hunt in "The Search for Other Earths"; **Paul Di Filippo** contributes "On Books"; plus an array of poetry you're sure to enjoy. Look for our July issue on sale at newsstands on May 11, 2010. Or you can subscribe to *Asimov's*—in classy and elegant paper format or those new-fangled downloadable varieties, by visiting us online at www.asimovs.com. We're also available on *Amazon.com's* Kindle!

COMING SOON

new stories by **Kristine Kathryn Rusch**, **Mike Resnick**, **Alan Wall**, **Carol Emshwiller**, **Sara Genge**, **Robert Reed**, **Will McIntosh**, **Neal Barrett, Jr.**, **R. Neube**, **Ian Creasey**, **Eugene Mirabelli**, **Don D'Amassa**, **Nick Wolven**, **Gregory Norman Bossert**, and many others!

EARTH III

Stephen Baxter

"Earth II" (*Asimov's*, July 2009) and "Earth III," two stories about human exploration and discovery in the far future, are separate pendants to Stephen Baxter's novel *Ark*, which has just been published by Ace Books in the United States. About the time Stephen's latest tale sees print, he'll be "anticipating the UK launch of the next novel, *Stone Spring* (from Gollancz), the first of an alternate-prehistory saga." He'll also be "looking forward to attending major conferences on H.G. Wells and on the search for aliens!"

I

At the foot of the ladder Vala paused, one slender hand on an iron rung, her face raised up to the tower's curving wall and the hulk of the Star above their heads. "Oh, Brod—what are we doing? This is the Eye—the holiest place in all the world!" And she murmured a prayer to the Sim Controllers.

She had been hesitant all the way, as the two of them had climbed up from the Eighth Temple—hesitant, Brod knew, but excited too, thrilled on some deep level to be joining in this illicit adventure. She wouldn't have been here if she hadn't wanted to come—hadn't wanted to be with *him*.

He dared to take her hand, touching her for the very first time, and she shuddered as if from the shock of it. "Oh, come on," he said gently. "We've come this far. Let's just climb to the top of this wall, and we'll be closer than anybody else in the whole world to the Star—"

"Which is why it's so holy! Which is why we mustn't do this!"

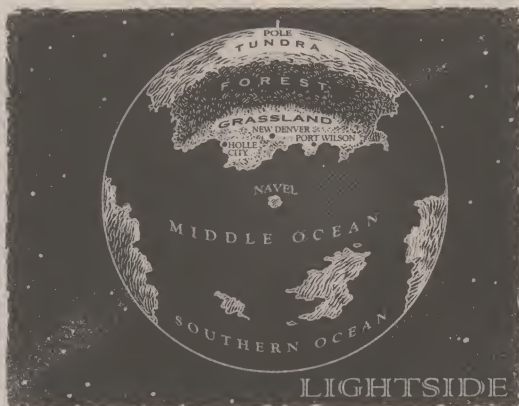
"But if we're quick, we can be back in the Colloquy sessions before anybody's even missed us. Who would ever know?"

"Nobody keeps secrets from the Sim Controllers."

"Well, I hope *that's* not true—"

She seemed genuinely shocked. "Brod!"

He had strayed too far into heresy for her, and he murmured reassuring noises. Brod had grown up with the theology of the Designers and Controllers, those strange silent figures who had designed the world and created all the people in it, and who watched everything unfold from behind invisible glass walls in the sky. Brod supposed he believed. It made more sense to him than the competing idea you heard bandied about in the taverns sometimes, that people had come to this world from—somewhere else. But what was real was the woman before him, her soft scent, and the way the breeze off the ocean caught the pale, milky wrap she wore, and the loose strands of red hair. She cast virtually no shadow, for on this island



Map Illustrations by Tim Foley

called the Navel, uniquely on all of Earth III, the Star was directly overhead—always was, and always would be.

Vala was twenty Great Years old, a couple of Greats younger than Brod himself, and, as a daughter of the Speaker of Speakers and a Sapphire, he knew she was a hothouse flower. Yet he had lusted for her from the moment he set eyes on her, as he never had for the world-weary whores of Port Wilson, or any of the women he'd talked into bed during his raucous careering around the island nations of the Middle Ocean. The fact that as a Sapphire she was destined to spend her life celibate made her all the more achingly desirable.

And he knew, under all the dancing around and the meaningless words, that she felt the same about him.

He kept trying. "Just a little further and we'll be there. Imagine the stories you can tell the other Sapphires—"

"Oh, *them*." She pulled a face. And then her mood seemed to switch, abruptly. "I'll do it!" And she grabbed the rungs and began to climb.

This was so sudden and impulsive she left him standing in surprise—and he wondered who was seducing who. But he scurried up the ladder after her, relishing the glimpses of a pert behind through the robe's billowing folds.

They soon came to the top of the ladder, and climbed onto a walkway, of roughened wooden slats set in basalt blocks. Brod had never been to the Navel before this Colloquy; he knew nothing of its treasures. Now he saw that the top of this cylindrical tower enclosed a kind of shallow dish perhaps a hundred paces across, a bowl coated by what looked like a thin, black layer of Slime.

And they weren't alone up here. Bulky animals were set out along one radius of the circular dish—he counted twenty of them, spaced a few paces apart. They were working their way around the bowl, the row of them sweeping around the dish like a clock hand—he saw that the outermost had to move faster than those nearer the center to keep the line straight. And they were scraping up the Slime layer as they went, exposing a surface that gleamed like the wing of a mirror-bird. Big brutes, each coated in thick brown-black hair, snuffling and snorting and their squat legs working—he recognized them as tractors, with their big gouging jaws and spade-like multiple tails, used in the fields around Port Wilson for plowing the fields and digging ditches. Whatever else he'd expected to find up here, it hadn't been these mundane beasts! And it must have been quite a challenge, he thought, to get them up here in the first place.

"You can see the whole island from here," Vala said, turning around, her gown billowing about her. "And the other islands beyond."

Brod glanced around indifferently. The Navel was a scrap of land in a sea like a burnished shield, one of a chain that stretched off to the west. There was really nothing special about the Navel—save that it sat precisely at Substellar, making it the holiest point on the whole planet, and the reason why tens of thousands of pilgrims made their way here every Great Year. So, despite the Navel's smallness, isolation, and poor harbors, the warehouses, hotels, restaurants, palaces, and churches that served an industry of holiness lapped right up to the walls of this central complex of temples and towers.

A bell chimed, marking the end of another eight-hour watch.

"We ought to be getting back," Vala said nervously. "My brother will be looking for me."

That was Khilli, a brute of a man and even more possessive than her holy father. "Oh, but we only just got here. I don't even understand what I'm looking at. What is this place?"

"We call it the Eye of the Master Controller." She pointed. "People built the outer wall, and this walkway. But the core of the tower and the great dish is Substrate." A structure put in place before humans ever came here—or a piece of engineered reality underlying the ephemeral Sim forms, depending on your faith. "And at the end of every Great Year, when the tithe fleets call, we have the tractors peel off the Slime that encrusts the Eye, just as they're doing now."

"And then what?"

She squeezed his hand, playful. "You'll have to wait until the end of the next watch to see! Although mucking about with the Eye is about as exciting as things get around here."

"Don't Sapphires have any fun? We have a good time in Wilson. If you came away with me you'd see." Suddenly he wondered what he was saying—she was, after all, the daughter of Elios, Speaker of Speakers! Again he wondered who was really in control here—and yet there was something in her manner, a mixture of innocence and coquettishness, that led him on helplessly.

Now she said, "Fun? What kind of fun? Show me."

"All right." He looked around. "We have tractors back home. Sometimes we have a little fun with *them*." He stripped off his jacket, revealing a muscled torso creased by the scars of a life of fighting. "Hold my coat—and watch!" He jumped down off the wall onto the surface of the Eye, and took an experimental step. On the bands of Slime the footing was good enough, though the Slime itself was unpleasantly slick and oily, but the mirrored surface beneath was as sheer as it looked. Hopping between the bands of Slime, he sprinted after the nearest tractor.

Vala called down, agitated. "Brod—oh, Brod! What are you doing? You'll get us into terrible trouble!"

He just grinned back. As he reached the beast he jumped, slapping the tractor's rump with both hands, did a back-flip, and landed with both feet on the animal's double spine. The moment of landing was always the trickiest, and he flailed as he shed his momentum, but then he stood proud. The beast lumbered on, indifferent, and he could feel the complex motion imparted by its six limbs, and the ripple of the banks of muscles under its tough hide. He whooped, and looked back at Vala.

Her mouth was open with shock, and she clutched her cheeks, as if horrified. But then she squealed, and clapped and jumped like a child. He imagined her telling *this* story to the other Sapphires, pretty virgins like herself gathered like flowers in a breeze.

But then a voice like a volcano's rumble came echoing up from below the walls. "Vala? Vala! You're supposed to be at the tithe accounting. Vala, where are you? If I find out you've been fooling around with that idiot sailor again . . ."

It was Khilli, the evil brother. Vala looked down, anxious.

Brod back-flipped off the tractor and hurried back to her. "You should go," he said. "I know." Yet she did not move.

And they kissed. Afterwards he was never sure who made the first move.

II

"**V**ala! Vala. . ."

As she waited for the Polar woman, Tripp, to visit her, Maryam listened to the stentorian voice of Khilli echoing through the streets of the Navel's crowded township. Son of the Speaker of Speakers, brother of the most beautiful of all the current crop of Sapphires, and a brute of a man in his own right, Khilli was capable of causing a great deal of trouble if you got in his way, Maryam suspected. And she hoped beyond hope that her son Brod had nothing to do with the strange absence of Vala.

In the meantime she awaited her visitor. For their private talks, Tripp the Polar would naturally come to Maryam's suite, rather than the other way around. Maryam and Brod hailed from Port Wilson, one of the principal embarkation points on the south coast of Seba, the continent that dominated the northern hemisphere. From the point of view of the Speakers, Wilson was essential not just for the tithes it provided itself but as a conduit through which flowed much of the wealth of the scattered communities of the continent. So Maryam had been given an apartment of several rooms in an upper level of this Seventh Palace of the Sim Designers, laden with fine furniture and with banks of photomoss lighting every dark corner. From here she had a grand view of the Navel in all its crowded complexity, and the flat light of the Star beat down on the world from its eerie position directly above her.

Whereas Tripp was just a Polar, a woman hailing from the edge of the endless shadow of Darkside. So she was stuck in some room deep inside the carcass of the Palace, a windowless, airless, lightless cell with a bathroom you had to share.

And, as the woman arrived and bustled into the room, there was something dark about Tripp herself, Maryam thought.

After a formal greeting the Polar unbuttoned her heavy coat, slumped in a chair, and accepted a glass of wine. Tripp was short, compact, muscular—it was said that it was better to be short and round if you had to withstand the insidious cold of the Pole—and she wore a heavy coat of tractor-fur lined with sheep's wool. Aged about forty, maybe ten Great Years younger than Maryam herself, she had a round, weather-beaten face, grey-black hair pulled back from a high forehead, and a customarily stern expression. Maryam didn't actually know much about her personally—she'd heard hints of husbands back home, of children. Tripp was too serious a person to make small talk with.

She had a leather packet that she opened, and spread documents of some kind over a small table expensively carved from solid basalt. She had to move a bowl of apples out of the way to make room. Maryam glanced at the papers, not very interested; they were clearly old—or *looked* old—torn, fragmented, yellowed, and stained with various fluids. Some were covered with close-printed text in an archaic language, and others bore enigmatic diagrams.

"You look as if you're having a bad watch," Maryam essayed, as they sat together.

"Aren't you? The negotiations over the tithe levels get worse every Great Year . . ."

A Great Year was twenty-four small-years, each of which lasted for forty-five watches—the time it took Earth III to circle its Star. And as Maryam grew older, the interval between these Colloquies, at which tithe levels were set and reset, seemed to get shorter every time.

Tripp was evidently distracted by Khilli's continued bellowing. "*Vala! Vala!*" "And the aggressive attitude of the Speakerhood is increasingly dismaying," Tripp said. "The young man you hear in the streets below, calling for his sister, is himself a son of the Speaker of Speakers."

"I know—"

"Khilli to me symbolizes the increasing dominance the Speakers are asserting, and not too subtly—the Speakers and their craven allies, who scuttle to obey in return for the waiving of a few tithes."

"Wealth breeds power, which accrues more wealth."

"Yes. And I suspect if we knew more about humanity's history, we'd recognize that as an old, old story." Tripp grinned fiercely, showing browned teeth. "At least you in Wilson are now finding out what it's like to be at the mercy of the Speakers, as we at the Pole have been for generations. We rely for our very survival on the trade the Speakers control. The metals and other minerals we mine pay for our tithes, and for the food imports we need to survive—"

Maryam nodded curtly, and glanced around. "My staff relayed something of your proposals to me." The Polars had been floating a suggestion to cut out the Speakerhood by negotiating a covert but direct trading deal between Wilson and the Pole. Aside from the direct benefit to the Polars, they argued that such openness would lead to a rapid growth in the planetary economy, after its strangling by the Speakers' control. Maryam said softly, "I'm never sure who's listening, here in this palace. It's best not to go into details here. Plenty of my companions are fearful of the wrath of the Speakers, and of the Controllers."

Tripp snorted. "More fool them. By indulging in such superstitions they are doing the Speakers' work for them. As if they are forging the bars of their own cages."

Maryam was irritated, as she often was, by the smug, strange Polars with their arrogance and certitude. "It may be a mere set of 'beliefs' to you, that we live in a Simulated reality. The fact is, it is the foundation of a religion of global reach and power. Otherwise we wouldn't be sitting in this Palace dedicated to the Controllers' worship, would we?" She rifled through the pages on the table between them. "And are these more pages of the Venus document you've been trying to buy up?"

"Those that aren't forgeries, good enough to fool me."

"Aren't you being contradictory? It seems to me that by seeking out these things you're tacitly admitting the historical existence of Helen Gray, whose life story is a key part of the entire legend."

Tripp looked irritated in her turn. "We don't deny *all* of the standard account of the past. You have to consider our myths and legends as source material, to be handled skeptically."

"We do believe that Helen Gray, and Wilson Argent, and Jeb Holden all existed. It's just that we don't believe they were created out of thin air, along with the Thirty-Seven Children, by any Sim Designers. They all came here in some kind of ship, from another world—from Earth I, maybe, or Earth II. A ship of space. Helen, Wilson, and Jeb were the only adults. We believe they fought—and my opinion is Wilson and Jeb fought over Helen, the only woman, as simple as that, and never mind more fanciful theories—and killed each other off a mere three Great Years after landing, and left the Thirty-Seven to grow up unsupervised, and fend for themselves as best they could. And we are all *their* children, a thousand Great Years later. That in itself is a remarkable story."

"But if that's so, where does the legend of the Sim Controllers come from?"

"Probably from half-memories of a space mission the Children grew up barely remembering, and never understood! There are pages in the Venus document that hint at a kind of madness among the crew of that ship—locked up for decades, whole generations living and dying in a metal prison. Some of them came to believe that it was all a hoax and they were being watched, the way you might watch a mirror-bird in a cage." She waved a hand. "And so this tremendous layered theology, this edifice of power and wealth—all of it came out of a child's bad dream! We're lucky that before she died Helen Gray managed to set down a kind of story of her world, and the trip she'd taken. She called it the Venus Legacy—we think Venus was a companion on the ship. The document was seen as heretical from the age of the first Speakers. It was locked away, copied, broken up so its imagery could be used as fine art, burned, forged . . . We suspect only fragments remain. But those fragments, when sifted, are enough to prove—"

"To the satisfaction of you Polars, at least—"

"—that this world is real. It's no Simulation. And that humans came here, somehow, from somewhere else."

"I thought you Polars were rationalists."

"Well, we have to be. We think the fact that we have to mine for a living has made us deeper natural philosophers than you farmers. We're favored for astronomy, too;

from here you rarely even see the lesser stars beyond the Star. We like to believe we rediscovered science.”

“Yet you accept the authority of a long-dead and semi-mythical figure like Helen Gray!”

Tripp pushed away the pages crossly. “Not just that, woman! Anybody who looks around at this world we live in—*really* looks—will see that humans don’t belong here. There are whole layers of life here, Maryam, one laid atop another, as immiscible as oil and water! We humans and our trees and grass and cows and sheep are latecomers. Before we came you had the tractors and the tunnel-moles and the mirror-birds, animals that seem to have been *engineered* to do specific jobs, engineered and then abandoned. The Slime seems to be a bacterial life form that may be a true native of this planet. And under all *that* you have the Substrate, as it’s called, relics that may be older than life itself, or anyhow the kinds of life we see now. The tractors and even the Slime are *like* our kind of life, relying on carbon and water and nitrogen—if we hadn’t forgotten everything Helen knew, we could probably say how alike. But we can’t eat the tractors, and the tractors can’t eat the Slime—that fact alone proves we’re different!—even if we’re from the same wider family, and we have some interesting ideas about that.”

Maryam tried to provoke her. “The Speakers say the Substrate buildings are elements of the vast Sim chamber that generates the world.”

“Phooey. They are clearly relics of some culture that was here long before we humans arrived. And yet they were drawn to the same pivotal locations we were, for surely the geometry of the planet hasn’t changed. This, in fact, is what I came to talk to you about. We’ve another proposal for you to consider.”

Maryam felt faintly uneasy, wondering what was coming.

Tripp picked an apple out of the bowl on the table. “Earth III orbits close to its Star, which is small and cool—according to Helen—compared to most stars in the sky.” She made the apple orbit her fist, turning it steadily. “The world is locked, and turns so that a single hemisphere always faces the Star.”

“That’s elementary—”

“Yes. But because of that elementary fact, our world is blessed with a certain number of unique locations. The Substellar point—right here. The Poles, for our world does have an axis about which it turns, even if the rotation is locked—or at least our north Pole, for there is only ocean at the south Pole. The Equator—especially those points on the Terminator, east and west, standing between dark and light. All these places the builders of the Substrate visited, for surely they were as attracted by their geometric significance as we are. There are hints in Helen’s document of structures the ship’s crew observed at geometric points *off* the planet as well as on it—places of orbital stability . . . And they built all this a long, long time ago. You can tell that by the rock layers that have formed *over* some of the structures. As much as a billion Great Years ago, perhaps.”

In an effort to regain control of the conversation, Maryam took the apple from her and bit into it. “Fascinating. So what is your proposal?”

Tripp smiled. “From my list of significant points, here in this static little system of ours, I omitted one.”

“Where?”

“*The Antistellar*. The point that is precisely opposite the Navel, the Substellar, on the other side of the world—the point at the heart of Darkside.”

“There’s nothing there but ice.”

“Maybe. We know nothing about it save mentions in Helen’s record—a record whose authenticity many dispute.” She leaned forward. “But what is surely true is that the Substrate builders must have gone there. And surely they built something there.”

Perhaps we Polars, we burrowing miners, will be able to understand it. Perhaps we'll be able to *use* it. And there's the matter of scientific curiosity, which Helen Gray counsels us to cultivate. Who knows what we might learn, about the world and ourselves? And anyhow it's surely better we get to it before the Speakers—"

Maryam sat back. "So this is what you're planning? Some kind of trek to the Antistellar? Surely it's impossible. The bitter cold of Darkside—"

"There has been a significant volcanic eruption this Great Year, far to the south."

"We know. We heard it! Half the dust and ash on the planet seemed to wash out on top of Port Wilson."

"That will have helped heat the air, globally . . . It may be that an expedition soon would have the best chance of succeeding in many Great Years."

"And you want us to help? How? With funding, manpower, ships?"

"All of those things. And you understand why we want to cut the Speakers out of this? If we do find something at the Antistellar—"

"You would possess a sacred site—grounds to challenge their hegemony." She glanced around, uneasily remembering that they might be overheard.

"There you have it. It's only the bare bones of a scheme for now, but . . . you Wilsonians are adventurers."

"We're often called worse than that."

"You often *behave* worse than that. If anybody can do this, you could—with us."

"Flattery won't help."

"Then what will?"

"Time." Maryam dropped her apple core on the table, and stood. "Time to think."

"Very well." Tripp stood, brushing down her cloak. "I'll take my leave. I will see you at the Opening of the Eye at the end of the Colloquy. Perhaps we can talk further . . ."

"We'll see."

As her visitor left, Maryam turned away and looked out on the city. The light had closed in a little; the clouds were thickening, and there was a grey haze of volcanic dust in the air. Yet the Star hung as still as ever, directly over her head. Looking up at its mighty face, glimpsed through the clouds, she saw how it was pocked with spots like disease scars, and its flesh crawled with electrical storms, like lightning.

Tripp's ideas swirled in her head. The thought of crossing the Terminator and traveling all the way through the dark to the precise antipode of this place was an intriguing one—yet scary, for how would it be to have the whole thickness of the planet between her and this sole source of warmth and light?

But from the city there rose up distant shouting, a pealing bell, and the crack of what sounded like a gunshot—fuelled, no doubt, by powder from the Pole. Her thoughts returned to the grubbier plane of politics, trade, power, and influence. There was another watch of talks to get through before the Opening of the Eye, the ceremony that would end the formal part of this Tithe Colloquy.

And Brod was still missing, she reminded herself, her son and the Sapphire girl. She hoped beyond hope that was just a coincidence.

She shook herself, turned, and went to wash and change and ready herself for the final sessions.

III

The watch bells sounded. The Tithe Colloquy was over for another Great Year.

Elios, Speaker of Speakers, led his attendants and the Colloquy's senior delegates out of the Tenth Temple where they had been meeting and up wide ceremo-

nial staircases, every step carved laboriously out of pink basalt, toward the roof of this building where, like most of the island's grander structures, it abutted the great Substrate pillar that contained the Eye. The rest followed in silence, or speaking only quietly.

Maryam, with growing unease, walking with the others, hoped that none of them had spotted, as she had, the bright red handkerchief dropped beside the stair, for it belonged to her son Brod, who had now been missing for more than a whole watch—as had the Speaker's daughter Vala.

They emerged onto the roof, and crossed a carved platform toward the central tower—a structure several times a person's height, a human-built shell of basalt blocks that cradled the enigmatic Substrate tower known as the Eye. Smoke curled above it, evidently coming from several fires.

At the tower, the dignitaries in their cloaks and robes and other finery had to line up to climb the ladders of rungs set into the wall. Few had any difficulty with the climb.

"Good strong Polar steel," Tripp murmured to Maryam. "And good strong folk too. We're a robust breed, you know, Maryam. Helen Gray says we all weigh more here than we would where she came from, and so over the generations we've all grown stocky as a result . . ."

Maryam found this sort of talk irritating. "How can a person weigh more or less, in one place or another? I sometimes wonder if you really can discriminate children's stories from any semblance of reality."

Tripp just laughed.

When it was her turn Maryam climbed easily up the ladder, and followed dignitaries from halfway across the world along the walkway at the top of the wall. It turned out that the smoke came from fires burning in pots of oil, attended by black-robed acolytes, and it hung over the Eye like a cloud, shading it from the Star above.

And the Eye itself was now revealed to her for the first time. Cleaned of greasy Slime, it gleamed, a curved bowl of a mirror, shining and perfect—and, if Tripp was right, perhaps of tremendous age.

Elios, tall, his head clean-shaven, climbed a podium to a small stage set up at one point of the circular wall. His aides stood along the wall at intervals beside him, acolytes and lay servants of the Speakerhood. Among these stood the Sapphires, the dedicated virgins of the temple—beautiful, almost shining in their white robes, and each standing beside a cage filled with birds whose wings glistened as they stirred.

"Mirror-birds," Tripp murmured to Maryam. "Another gift from the Pole . . ."

But Maryam was busy counting the Sapphires. There were eleven of them—and there should have been twelve, and she saw an unattended birdcage, and uneasy-looking officials glancing nervously around. Well they might have been nervous, for the missing girl was Vala, and gone as long as her own son had been gone, and Maryam was starting to feel very worried indeed.

Elios spoke now, his voice carrying across the Eye's gleaming surface. "I, Elios son of Elios, Speaker of Speakers and forty-first occupant of the Left Hand Seat, welcome you all to this place. As you know, we hold our Tithe Colloquy every Great Year, which is twenty-four of the years of Earth III as measured by the astronomers, and which matches the Duty Cycles of the Controllers who watch over the Simulation which envelops and sustains us all. And now, with another Great Year of Simulated life having been granted to us all, let us give thanks—and let the Controllers' Eye open!" He brought his hand down with a sharp chop.

The acolytes doused their fires with buckets of water, and the smoke began to clear. The Sapphire girls, the eleven who were present, opened their cages, and mirror-birds rattled into the air, their wings gleaming; confused by the smoke, they wheeled and darted, cawing softly.

But there was a murmur, and a disturbance worked its way along the circular wall. "Out of my way—out of my way, you cretin!"

"Khilli," murmured Tripp. "And he doesn't look happy."

Maryam saw Elios's son approach his father. He turned, a broad, powerful man dressed entirely in black, with his massive fists bunched, his face clenched in a glare. "Gone! She's gone! Vala—he took her away on that ship of his, the Wilsonian tub, back across the sea. He took her! Wilsonians! Maryam mother of Brod! Where are you? You have some explaining to do."

Tripp tugged Maryam back into the crowd. "It may be better to be discreet for a while . . ."

The smoke cleared, and the pale pink-white light of the Star fell on the Eye in beams, dead vertical and shining in the smoky air. Where they struck the mirror they were reflected to a perfect focus, high above their heads.

"It must be a parabola," Tripp murmured. "This is my fourth Colloquy, but the first time I've been invited up here . . . What a display." She leaned back and lifted her head, and gasped. "And—oh, look! Up in the sky!"

Maryam, squinting up, saw a kind of shadow form on the broad face of the Star, grey and translucent, and rippling with obviously artificial patterns, like waves.

"More Substrate!" said Tripp. "I told you Helen and the others saw orbital structures. Perhaps whatever is up there is somehow controlled by this 'Eye.' But what can it have been for. . . ?"

The mirror-birds, fluttering and cawing, were drawn up along the reflected beams by their natural affinity for light. One by one, as they reached the focus, they flew into brilliance and were extinguished in a crisping of flame.

IV

Tripp found Brod outside Port Wilson, plowing a hilltop. It was nearly half a Great Year after the debacle of the last Tithe Colloquy on the Navel—and nearly as long since the allies of the Speakers had laid siege to Port Wilson, in the war spat that had flared up after Brod's abduction of Vala the Sapphire.

"But it was no abduction," Brod said. He straightened up, sweating hard despite what felt like a cool watch to Tripp. He was one of dozens of men and women laboring with hand-held hoes and ploughs in this roughly marked out field. Coated with mud like the others, he'd been difficult to find. "She wanted it as much as me. More, maybe. No matter what the Speaker of Speakers says, or his tractor-spawned son Khilli. Sometimes I think . . ."

"What?" Tripp was closer in age to Brod's mother than to him. It was wickedly funny to see this big strutting soldier boy put to work in a field, and so evidently confused. "Tell me, Brod. What do you think?"

"Sometimes I think she was in control the whole time." His handsome face, streaked with dirt, twisted as he forced out the admission. "Sometimes I think *she* played *me* to get what she wanted."

"Which was what?"

"Not to be a Sapphire, of course. Not to be a living religious token totally dominated by her father and brother. You know, not only are they supposed to stay celibate, those girls aren't even allowed to *speak* for whole Great Years at a time. Wouldn't you want to get away?"

"I suppose so. So she got what she wanted?"

"Yes. And I got *this*." He waved a hand at the field.

They were standing on a hillside high over Port Wilson, and the view, south toward

the sea and north inland, was rather magnificent, Tripp thought. This part of the coast was craggy and folded, a relic of ancient tectonic events; the hills crowded close, giving way to a sheer cliff face that fell away to the sea. Here the river Wilson forced its way to the sea, and the port had been established in its estuary, where a deep natural harbor had been enhanced by a long, enclosing sea wall. To east and west the land quickly rose up to become cliff faces, but even here people lived, in houses built on terraces. To the south lay the sea, with the Navel somewhere far over the horizon. The huge Star hung over this mid-latitude location, with the faintest tinge of pink in its light.

And Tripp could see the ships of the holy armada gathered in a loose multiple arc around the harbor, effectively blockading the trade on which Port Wilson had made its fortune—and putting a stop to the raids and petty wars indulged in by headstrong young men like Brod. Meanwhile, to the north, Tripp could see the rising smoke of the fires of Khilli's besieging army.

It was remarkable that, though this tremendous force on land and sea was entirely under the control of Elios and Khilli, the Speakers had not had to pay a fraction of a credit toward its assembly and provisioning. This was a war being fought by the allies of the Speakers on the promise of rewards from the Sim Controllers, the reduction of tithes, and perhaps a little plunder, and in the longer term permanent commercial advantage.

And in the middle of it all was Brod, the cause of all the trouble, leaning on a hoe.

"The siege is evidently working, then," Tripp essayed.

"Well, you can see that. We always imported most of our food. The Speakers cut that off. So here we are trying to grow potatoes on this cruddy hill. We haven't even got enough tractors to do the work, and the army took all the horses—"

"Which is why you're breaking your back up here."

"I spend more time chasing off the rabbits than farming. Whichever Designer came up with *those* little bastards needs a good kicking." Miserably he wiped muddy sweat from his brow. "The top families have got to 'show an example,' my mother says."

Tripp glanced around theatrically. "No sign of Vala, however."

Brod raised an eyebrow, and looked away.

Tripp said, "Well, maybe enough blood has been spilled. And the disruption this fight is causing is harmful, even for neutrals. All over the continent people are going short. Most of *our* trade comes through Wilson, you know. There are other ports, other trade routes, but—"

"Which is why my mother asked you to come to try and broker some kind of truce."

"And why I just spent a fortune bribing my way through Khilli's cordon. Look, I'll go down into town and see what your mother has to say." She gathered her cloak around her. "But, Brod—the deal might involve you giving up Vala. That's what this is all about, after all."

"I won't give her up," he said sternly. But his face softened. "And besides, she probably wouldn't go." He turned back to his work.

V

"Oh, Tripp, of course she was in control all along."

Maryam had a fine apartment set on a ledge cut into the cliffside, connected by a scary-looking rock staircase to galleries and other apartments. Picture windows let in the light of the Star and overlooked the harbor, but the apartment was far enough out that even when the windows were thrown open any noise was only a remote

murmur. Not that the harbor was bustling now, Tripp saw as she gazed out. Ships were crowded within the sea wall, but many of them had evidently been stuck there for a long time; all were empty of crews and cargo, and some had been stripped for resources for the starving port, their sails for their cloth, their crude steam engines perhaps for some agricultural or military use, even their wooden decks and hulls for timber.

Overlooking all this, Maryam patiently watered flowers in a window box, and spoke about Vala the Sapphire.

"She was always in charge. I could tell from the moment I met her—which wasn't until after, as you will recall, Brod had 'abducted' her and we were already in this terrible mess, with Elios spitting fire and Khilli rampaging like a rogue bull. Brod was obviously besotted with her, and he still is—and I think she's attracted to him, maybe even loves him." She smiled wistfully, and ran a hand over her short-cropped, grey-blond hair, and for a moment she looked like a mother, rather than an elder of a city under siege. "You've seen Brod. What's not to love? But Vala has been playing him for half a Great Year already. Vala is scheming, manipulative, sharp as a nail, and she was obviously ready to grasp the first opportunity that came along to escape the doom of becoming a Sapphire."

"She is her father's daughter," Tripp said. "At the Pole we say that Elios is the toughest occupant of the Left Hand Seat in living memory. It would be surprising if she didn't share some of his qualities."

"So she escaped, into the protection of one of the strongest states on Seba—us. She probably foresaw her father's rage, and her brother's. But I don't think she imagined she'd provoke a war, an invasion of Seba under the Shuttle Banner, a siege that's already lasted half a Great Year nearly—and hundreds dead. All because of her. But it isn't *about* her, of course."

"Isn't it?"

Maryam set down her watering can. "Why don't you take a seat, Tripp? Some tea?" She clapped her hands. "And won't you take your coat off?"

"I already did," Tripp said, somewhat chagrined, as she sat a little awkwardly on an overstuffed sofa. "We Polars wear a lot of layers."

"Of course." A boy appeared, listened to Maryam's request for tea, and scooted off. "It will just be nettle tea, I'm afraid; the rationing has put an end to so many of the finer things . . ."

"We were speaking of the causes of the war."

Maryam sighed. "So we were. Look—the Speakers have clearly used the 'abduction' of Vala as a pretext for launching this assault, on land and sea. Quite disproportionate to any offense—and quite unnecessary, incidentally. A little diplomatic and theological pressure would have been quite enough to make most of our citizens hand the girl over." The boy returned with a jug of tea and two cups. He set his tray on a small table and poured.

"But of course the Speakers have other goals. They have always acted against any power they believed had even the slightest chance of becoming a threat to their hegemony. We Wilsonians have worked hard the last few generations, and have gotten to the point where we control much of the trade along the south coast of Seba, and between Seba and the Navel. The Speakers benefit, but we skim off a fair share. So we're a challenge to the Speakers, and they've probably been looking for some way to slap us down for a long time. And by long, I mean perhaps centuries—you don't get to be a theocracy that's already survived a thousand Great Years without thinking in the long term. But the way they've done it is ingenious."

"By forging an alliance of your enemies."

"Enemies—trading partners—it's hard to tell the difference at times! We're a vig-

orous young nation, Tripp, and we can play rough with our neighbors. It's all in pursuit of trade, of course, but I suppose if you've been on the receiving end of one of our sieges or raids you'll probably bear a grudge.

"And into this seething arena of power politics and revenge walks my Brod! What an opportunity he, aided and abetted by the fair Vala, has offered those wizened old men around the Left Hand Seat. So you have a romantic war of rescue and revenge. But the irony is, it isn't really Brod's fault. As we've said, Vala was never a helpless abductee."

Tripp nodded, sipping her tea. "Which is why you sent for me."

"Yes—and thank you for coming all this way. I suspect we have a common interest. Obviously *we* want some kind of settlement of this conflict, without further cost in lives and trade. And you have your own trading targets to meet—"

"And, if we miss them," Tripp reminded her, "the ultimate result is we starve. For we rely on food imports from the lower latitudes."

Maryam studied her, an uncomfortable scrutiny. "And you especially, Tripp, have a motive for seeing this sorry business settled."

"I do?"

"I haven't forgotten your talk of an expedition to the Antistellar. All postponed because of the war, I imagine? Look—if you help us resolve this conflict we of Port Wilson will help you achieve your goal. Materials, supplies, tractors, crew—whatever you need."

Tripp rubbed her cheek. "I should tell you that most of my people, the elders, aren't interested in the Antistellar. It is half a world away even from us—"

"But *you're* interested," Maryam said bluntly. "And it's you who's sitting here. You're a good negotiator. I've seen that." She sat back. "Offer them a deal, concerned specifically with the reason they went to war: Brod and Vala. You can offer a punishment for Brod, to return Vala—whatever. If we can resolve the immediate issue there's a good chance this whole conflict will just dissolve."

Tripp nodded. "It might work."

"It's certainly worth a try, for all our sakes—"

There were footsteps, and Vala came bustling in. "Good mid-watch, Maryam." She turned to Tripp, who rose.

Maryam smiled. "Vala, this is Tripp, from the Pole station. I'm sure you met her at the Colloquy last Great Year."

Vala wore a short skirt, shirt and sweater, sensible-looking shoes, and she carried a racquet. She smiled prettily at Tripp. "Forgive me if I can't remember your face, madam Tripp. There was rather a lot going on at the time!"

Tripp bowed her head, forgiving. But *she* hadn't forgotten Vala's face. Who could? Her delicate features—that long nose, the high cheeks—the bright red hair and startling blue eyes seemed, if anything, accentuated by the subtler, slanting light of this mid-latitude location. She was thin, as most of Wilson's citizens seemed to be after the long siege, but Vala had always been slender, Tripp seemed to remember, and she had always worn it well. Most inhabitants of Earth III were stocky, but humans who had a deeper sense of aesthetics seemed to prefer a slender build.

Tripp found herself staring at this girl whose very understandable desire to take hold of her own destiny had caused so much trouble—and who was coming close to breaking the heart of a young man who at this moment was scraping at a hillside trying to grow potatoes. Vala smiled, evidently used to stares, and Tripp looked away, embarrassed.

Vala turned to Maryam. "I thought I'd play some racquets with Roco."

"Her racquets coach," Maryam murmured to Tripp. "Brod will be back for his supper—"

"Oh, I'll be home long before then. Bye—and nice to meet you, Tripp from the Pole!" She skipped out, swinging her racquet.

Maryam sighed. "Poor Brod! I don't *think* she has feelings for Roco. But young men seem attracted to her like mirror-birds to the light."

Tripp murmured, "She is beautiful—no wonder she causes so much trouble—it's not just her physical beauty but the friendliness in her face, the openness—I could barely take my eyes off her myself!"

"I noticed," Maryam said sternly. "Funny lot, you Polars. Well—I suppose you'd like a bed for the sleep watch? It will be another tricky journey, I imagine, back out through the line of the siege, if you're to meet Elios . . ."

VI

Despite the siege's privations, at least within the Wilson perimeter there was a semblance of civic order—and evidently, judging from Maryam, there were still citizens able to live reasonably well. Not to mention Vala and her racquets!

But for the besieging army things were much rougher. There was little sense of order beyond the basic military command structure, and the army units were expected to fend for themselves. So the countryside for many kilometers around had been systematically plundered, and all the way up the valley of the Wilson there was only bare, trampled earth where once crops had grown and sheep had grazed.

In their camp, some soldiers had been on station for nearly the whole siege, living beside drains they themselves had dug out to the river, and wearing uniforms that were reduced to the color of the mud. Everywhere smoke rose from the endless fires, and Tripp saw rat carcasses and other indefinable bits of meat roasting on skewers. All of this went on under the flags of the Speakerhood, listlessly fluttering banners that showed a fat bird-like shape with fixed wings, a black underbelly, and wheels.

"It doesn't change," the young lieutenant from New Denver said, as he and Tripp picked their way carefully through this morass. He had been assigned as Tripp's escort and guard. "Watch after watch. The Star just hangs there in the sky, and we all sit in the mud, waiting. Every so often we mount a raid against the walls, or the Wilsonians come riding out against us, and there's a bit of drama. But then it's just back to sitting and waiting."

Tripp squinted up at the Star; lacy clouds hung before a face mottled by spots and flares. "We humans came from a turning world, where a sun rose and set. I wonder if we miss that, on some deep level."

"It feels like I've been here all my life," said the officer miserably.

They let their horses walk on in silence.

Naturally the Speaker of Speakers wasn't living in the mud with his soldiers. At a small jetty near Wilson's main harbor wall, a smack was waiting to carry Tripp out through the picket-line of blockading ships and to the Speaker's yacht. This was a grand affair, painted brilliant white, standing well off the coast and out of range of any gunfire. The smack's captain seemed a gossipy sort, and he regaled Tripp with tales of the twice-daily arrival of provision ships from the Navel, and the petty graft that followed.

Tripp, weary and travel-worn and carrying her packs of spare clothes and trade goods, felt shabby indeed as she was conducted into the august presence of the Speaker of Speakers, and told to sit on a couch to wait. In his white robe, Elios easily filled the chair on which he sat, as he received submissions from advisers and ministers who entered the cabin one after another, with an aide at his side taking notes and murmuring in his master's ear.

The chair itself, however, was unusual—not a throne but practical-looking, a sturdy metal frame hung with canvas, and with straps, unattached now, that could be buckled around the Speaker's girth.

Elios saw her looking. There seemed to be a gap in the flow of supplicants, and the Speaker of Speakers beckoned Tripp forward. "I noticed you studying the chair."

"Yes. I couldn't help wondering—we Polars like to think of ourselves as engineers, Speaker—"

"Could this be the Left Hand Seat itself?"

Boldly Tripp walked around the throne, and Elios's assistants looked faintly alarmed. "Light but sturdy. Harnesses to hold in the occupant. It is a seat from a ship, a ship designed to sail in the air. Just as the legend of the Landfall says."

Elios slapped the metal frame. "Sadly the original is in a vault, somewhere deep beneath the ground on the Navel—precious beyond reckoning, as you can imagine. But this is said to be a fair replica, and is itself hundreds of Great Years old. But—'legend'?" His voice was sharp, faintly mocking. "Are you not a true believer, Madam Tripp?"

"I'm no theologian, Speaker."

"Yes. Best we each stick to what we know—is that your philosophy? I imagine if we all did that the world would be a less turbulent place. My advisers tell me you're here on a mission given you by Elder Maryam in Wilson."

"And for my own purposes too, Speaker."

"Of course, of course." He eyed her bag. "To which end, you bring me gifts, do you?"

"Nothing so coarse, Speaker. Trade goods." She opened the satchel. Within, she had samples of new kinds of hardened steel and brilliant glasses, a novel musket trigger mechanism, and a box-like device that exploited the strange properties of photomoss.

The Speaker inspected all these carefully, and handed them on to his advisers. He was intrigued by the photomoss. After being exposed to Starlight for a while, it could be shut up inside its box, and a small metal wheel, attached to the outside of the box, would begin to turn.

"This is just a toy, of course," Tripp said. "But it's meant to illustrate a basic principle. Speaker, we think the photomoss is an engineered organism. Much of what it does is not, apparently, for its own benefit, but for the benefit of a user. In that, it's like a tractor beast, which happily digs out furrows and ditches and canals not for itself but for whoever commands it. There is another sort of moss that, we believe, is intended to strain the salt from seawater. The mirror-birds seem designed to scatter light into the dark—"

"I've heard of this idea, of course," the Speaker said. "These animals were changed, made into what they are, for some purpose or other, by people who have long gone."

"People—intelligent creatures like us, or not—yes. That's what we think. They went away, or died out. Since then the various creatures have evolved away from their original forms, but they still retain traces of that engineering, which we can exploit."

"Or," said Elios, "the creatures were *Designed* that way, by those who made the world. It's just that we poor Avatars have yet to discern the purpose of that Design."

"Well, that's possible too." Tripp saw the slightest smile crease the corners of the Speaker's eyes, and she knew that the theology didn't matter; they were talking business here. "With the photomoss, it clearly gathers energy from the Starlight—but, unlike our own grass and trees, and indeed unlike the Slime, it doesn't exploit much of that energy to fuel its own growth. Instead it dumps it out as light—which we find useful for lighting shady rooms.

"But we can do more than that." She opened up the wooden box and showed the Speaker a kind of mesh of electrodes around the moss clump, and a small, simple electric motor. "It's possible to use the flow of energy to power this engine. I'm sure

you see the possibilities, if we can scale this up. You can have photomoss reliably and cheaply powering machines to do whatever you like—dig ditches, build your palaces, drive carts without horses—”

The advisers gasped in wonder at these visions.

“Or drive machines of war,” said Elios. He smiled. “But none of these miracles are available yet, I suppose.”

Tripp shrugged. “I’m here to ask you to help fund the development of these advances, as well as to purchase the results in the long term.”

Elios dismissed the photomoss box with a wave; an adviser took it. “And I suppose all of this is contingent on our resolving the current war. Shall we get to the point of your mission, Madam Tripp?”

Tripp sat on her couch. “Yes, Elder Maryam asked me to speak to you. I think she hoped that a neutral voice, a relative outsider, might be able to broker a solution satisfactory to all parties. But I don’t deny an ending to this conflict is in all our interests. The shutting-off of such a vital trading link is strangling global trade—”

“Yes, yes. And I suppose you’re authorized to offer me the return of my daughter—yes? And perhaps the handing over of that buffoon Brod, who caused all this trouble in the first place.”

“Or at least a commitment to punish him.”

“But I’m sure that Maryam explained to you, point by point in her own tedious way, how the lovestruck youngsters are only one reason for this conflict.”

Tripp forced a smile. “Actually the word she used was ‘pretext.’”

“Ha! Well, she would. You are caught in the middle of a conflict with much wider purposes—political, economic—even strategic. Why do you think she summoned *you* as the ambassador of peace? Have you thought that through, Polar?”

Tripp stiffened, feeling insulted. “Go on, Speaker.”

Elios counted the points on his fingers. “You at the Pole are long-term rivals to the Navel, in terms of your divine position. Even you secularists must see that in terms of strategic advantage. You’ll have to be dealt with some time, I imagine, but for now we want to keep you calm—neutral—on good terms, as long as possible. Also we need your steel and gunpowder, of course. This is the calculation Maryam has made—that we’ll listen to you.” He sat back, his face hard under his shaven head, his plucked and dyed eyebrows fierce, and ticked off the next point. “And what is it we are being encouraged to hear from you? She instructed you to offer us a deal concerned with the specific reason we are supposed to have gone to war: Brod and Vala. And if you make such an offer, and it’s just, and if our low-browed allies get to hear about it—and they will, Maryam will make sure of that—then I will not honorably be able to turn you down. For if I do there’s a good chance my alliance will dissolve. You see? *They* think they are fighting for my family honor, and the sanctity of the religion; they think it is a war of heroes and warriors and so forth—and not about hegemony, about breaking the power of an upstart statelet. And if that pretense is taken away, they will either not understand the geopolitics, or will be repelled by it. Either way we must withdraw, and Maryam will win.”

Tripp considered this flood of ideas. “You know, I really am just an engineer. I’m not used to thinking this way. You make me feel—”

“Naïve?”

“Innocent, anyhow. But the fact is, Speaker, the offer to return Vala has been made. So what are you going to do about it?” She found she was anticipating Elios’s response with some interest.

But what that response might have been she was never to learn, for just at that moment a messenger burst in with the news that Elios’s son, Khilli, sick of the drawn-out siege, had taken matters into his own hands.

His face white with anger, Elios hurried out. It took Tripp some time to find somebody to escort her off the yacht safely, and back to shore.

VII

“Brod! Brod son of Maryam! I am Khilli son of Elios! Come out here and meet me! Brod, you are a coward and a kidnapper and a rapist, and I will avenge my sister. . . !”

Once off the smack, Tripp was met by her patient New Denver officer, and escorted back through the besieging army’s camp. But even from the harbor she could hear Khilli’s bellows. Single-handed, armed only with a sword and spear, he was stalking beneath the walls of Port Wilson, and was yelling up his challenges and insults to Brod.

Tripp shook her head. “I can hardly believe it. One champion challenging another to single-handed combat? Are we really reduced to this?”

But Khilli’s challenge had the whole camp churned up, and Tripp could hear the roars of support, and the clatter of spears and musket-butts on shields. The Denver officer said, “It’s one way of getting it finished. Oh, Madam Tripp—there are a couple of traders who said they wanted to speak with you.”

“Traders?”

“From Holle City. They said you knew them.” He pointed to a small supply dump, where fresh horses waited, and two strangers dressed in heavy, concealing cloaks. The officer stuck out a hand. “Been interesting meeting you, madam. Travel carefully now.”

She shook his hand, uncertain. “Thank you, Lieutenant.”

Then, her samples pack and rucksack on her back, she walked warily toward the strangers. Even when she’d come close enough to touch them she still couldn’t see their faces within their heavy hoods. “So,” she said. “Holle City?”

“Of course not,” the taller of the two hissed. He pushed back his hood just enough to let Tripp glimpse his face.

“Brod. And Vala, I suppose. What’s going on?”

“My mother was going to give Vala up to her father—and me. That’s what’s going on! As you knew very well, Tripp, as you went over to the Speaker’s yacht to broker the deal.”

“I was hoping to stop the bloodshed—”

“You could have *told* me.”

“Evidently your own spies work well enough. And what about Khilli?”

“What about him?”

“Aren’t you going to respond to his challenge?”

“Are you joking? I could take down that tractor-spawned brute, but his companions would rip me apart. No, ma’am, Khilli can wait.”

“And I,” Vala said from the shadows of her own cloak, “am not going back to the Navel. To be a Sapphire would have been dull enough. To be a failed Sapphire, returned in shame—not for me!”

“Then what? What do you want of me?”

“We’re coming with you,” Brod said simply. “There’s nothing for us here. We’ll make a new life at the Pole—together.”

“As simple as that?”

“You owe us, Tripp,” said Vala heavily.

“I owe you nothing,” Tripp snapped back. “And besides, don’t you think we’ll be pursued? Your father no doubt has spies riddling Port Wilson—and that brother of yours doesn’t strike me as the kind to give up easily.”

"We'll deal with that as it comes," said Brod.

"Oh, will you? You've dealt with it all so well so far, haven't you? And what about the journey itself? You're talking about a trek to the Pole! Have you any idea—"

"Brod! Brod, son of Maryam! Come down here so I can strangle you with your own intestines. . . !"

"He's not getting any more patient," said Brod. He untethered three saddled horses, and jumped on the back of the strongest-looking. "Shall we make a start?"

Vala grinned and leapt easily on the back of her mount.

And Tripp, gloomily resigned to the fact that neither of these two children had any idea what they were letting themselves in for, even if they weren't being pursued by a demented super-warrior, clambered aboard her own beast, pulled its head to face the north, and set off.

"Brod! Brod. . . !"

VIII

They were to travel only fifty kilometers on their first set of horses, Tripp said. Then they'd change to a solution better suited to the long haul—which spanned no less than twelve thousand kilometers, all the way to the Pole itself.

In those first hours Brod was intensely excited, charging along the open road into unknown realms, with a beautiful girl at his side and an enraged enemy at his back. "We're making history!" he cried. "They'll tell our story for generations!"

And Vala laughed prettily. But she stayed back with Tripp, who kept her own horse at a steady trot, and Brod soon had to rein in his own mount.

Tripp praised him for being "sensible." "Horses must have their own ancestral dreams of a lost world where their grandmothers were slender and fleet. They'll always run if you give them their head. But they are better suited to a gentle, steady trot. Their hearts won't take it, not if you push them too hard—and you're likely to break their spindly legs."

Brod felt restless to hear this sage advice. Sensible? Shepherding his horses for fear they might drop dead under him wasn't in his nature at all—and not what he had expected of this journey, which he had vaguely imagined as a kind of running skirmish with Khilli and his warriors.

But Vala surprised him by adapting quickly to the ride. She even seemed interested in Tripp's yakking about the horses' history. "How strange to think that horses, like people, might have been brought here from somewhere else. And, I suppose, sheep and cows and pigs and chickens as well."

"Yes. Along with grasses and wheat and fruit trees—everything you can eat must have been brought here in Helen Gray's ship, for we can't eat Slime or tractors."

"I can imagine carrying a box of grass seed. But how could you carry a horse? I've seen the trouble it takes to ferry a horse a few kilometers by sea. My father says this is proof that we live in a Sim, because you could never carry a horse in a spaceship."

Tripp shrugged. "There's much we don't know about our origins. We'd know more if not for the fact that your father and his predecessors have assiduously destroyed any relic they find of that long-ago space journey. Perhaps you could carry a living horse frozen, like meat. Or perhaps you could take it from its dam's womb as an infant, and carry it that way." She slapped her own mare's neck. "But certainly, if this nag is an Avatar, why isn't she better suited to this world?"

"I suppose you'd say humans should be better suited to living here too."

"Well, so we should. If we were meant for this world, there would be at least some parts of it where we could go naked."

Vala actually blushed.

Brod's interest was snagged for the first time. "Naked?"

"Sure. Presumably at the equator, the Substellar, at least. Why should we need thick layers of clothing to survive even there? Why should we not have been made fit to go unclothed, like animals?"

Brod roared laughter. "There you are, Vala! If Elios and Khilli went around the Navel bare as babies, they wouldn't seem half so impressive!"

"And nor would you," she said pointedly, and trotted a few paces ahead of him. But he could tell she was teasing him, and his heart warmed.

After the first fifty kilometers Tripp directed them off the main north road, which even this far from Port Wilson was reasonably metalled, and led them a couple of kilometers down a track to a travelers' stop with a small inn and a much larger stable.

"Wonderful!" Vala cried, leaping down from her horse. "A bath, a change of clothes, a good meal—"

"But we can't stop," Brod said, glancing back down the road. "Your brother won't be far behind."

"Brod is right," said Tripp. She climbed down stiffly, and made for the small dwelling house. "We're going to change our transport here. But we must press on . . ."

Vala pouted, and she looked as if she was going to protest for a moment. Brod had seen her deploy her temper before, and he knew it was a formidable weapon. But she quickly perked up when Tripp began to assemble their mode of transport from here on.

On the way down, Tripp had left a compatriot here at the way station, another Polar, a man named Astiv Pellt. Older than Tripp, he was shorter, rounder in his layers of coats, and fierce looking—until he smiled, to reveal rows of discolored teeth. He said he was Tripp's cousin. "But then we're all cousins up there," he said, grinning again. "Not a very big place, you see. We all have lots of husbands and wives, and cousins and second cousins . . ."

Astiv brought over two carts, covered with wool-lined tarpaulin, with three teams of horses to drag them.

"My backside wouldn't stand twelve thousand kilometers on horseback, even if yours would," Tripp said. "And we design for redundancy. We can lose one whole horse team; we've a spare. We could lose a cart; we've a spare. Astiv has made sure we've got plenty of food—we at the Pole have perforce become experts at drying, salting, and other storage methods—and we can collect the water we need as we travel. We have plenty of coats, boots, hats, blankets. We'll travel for two watches and rest for the third; the horses need their sleep. But we'll sleep in shifts, with at least two of us awake—and driving the carts—at any moment."

Brod tried to look as if he knew what he was doing as he walked around the wagons, checking their iron-rimmed wheels and leather harnesses. He had more experience of ships than land transport, but he could tell when something was soundly made. He was impressed by the Polars' preparations and evident competence.

Vala, though, seemed faintly disappointed. "I half-thought we'd be bowling along in some magic chariot driven by photomoss or something. Like the gadget you gave my father. How long do you think it will take us to get there?"

Astiv shrugged. "Three hundred watches. Maybe a little more."

"Three *hundred*?" Vala's eyes were wide. "That's twenty small-years!"

"It's a big world," Tripp said, "and we have to cross a fair chunk of it." The carts both had simple hourglasses fitted. Tripp turned one of these. "We'll wait one hour," she said. "Go bathe, eat, eliminate—whatever. And then we leave, with or without you."

* * *

The landscape was monotonous, a rough plain littered with eroded hills and patches of grassland and forest, and wider lakes of Slime, black as the inside of Brod's eyelids. The towns were few and far between, and they never stayed over anyhow, pausing only to change their horses. You rarely even saw any evidence of farming or logging save close to the towns, though you did sometimes see untamed horses and cattle, and even a few wild tractors patiently plowing furrows in non-existent fields.

Tripp said that this continent of Seba was the largest on the planet, a great shield of rock that covered a quarter of the world's surface and stretched all the way to the Pole and beyond, though it was broken by inland seas and lakes. And as watch after watch wore by, though the four of them became used to exchanging their roles as drivers and passengers and sleepers, the sheer immensity of the world began to bear down on Brod's limited imagination.

It made it worse that he was never alone with Vala, and neither of them had the nerve to do more than a little gentle flirting in the presence of the stolid figures of the Polars.

And, even deeper than that, he started to miss his old life—his companions, his ships, his adventures—even his enemies—even his mother. It had been a grand gesture to uproot himself from everything he had grown up with, and set off into the complete unknown. But somehow he had not thought ahead to *how* it would actually be to have his whole world stripped away like this, to be plunged into a situation where he wasn't even particularly competent, let alone in command. Sometimes he even wished Khilli might catch up with them, so he could remind Vala how good he was in a fight.

It got worse yet when the mixed landscape of grassland and scattered copses gave way to a belt of forest, of fir and larch and pine, that gradually thickened until the road cut between towering green walls, and the Star, a little lower in the sky every watch, sent its light in long shafts between the slim forms of the trees. Tripp softly told them there was some element of danger here, from dogs, cats, even pigs long gone wild, and Brod kept a blade ready at his belt.

Vala, though, seemed fascinated. "I never saw so many trees. But why are there so many just here?"

"Because of the latitude," Tripp said. She spoke carefully; in their early conversations it had become evident that Vala, a creature of the Palaces of the Navel, hadn't been entirely clear that the world she lived on was a sphere. "The Star is lower in the sky here, and gives us less heat. These trees are more suited to the cold than the shrubs and grasses of lower latitudes. This boreal forest stretches right across Seba, to east and west, between the grasslands to the south and the tundra to the north. And wherever there is land in the southern hemisphere, at the same distance from the Substellar, you'll see similar vegetation.

"If you could see the world from space, it might look a bit like an archery target, with bands of vegetation all circling the Substellar point, broken only by stretches of ocean." She sketched a sphere for Vala. "You see? From everywhere in this band around the face of the world, the Star would be seen to be at the same elevation in the sky. And so similar vegetation will grow."

"How strange," Vala said. "How wonderful! And there's more to come? This tundra you spoke of?"

"Oh, yes," Tripp said, smiling. "And wonders beyond that too." And Vala smiled back.

Brod was irritated. They seemed to be building a relationship, like that between an eager student and a patient teacher. A relationship that excluded *him*.

It got even worse when it started to snow.

The first serious resistance the holy army met was at the southern rim of the great forest belt.

A few kilometers to the west of the main trunk road running north from Port Wilson, Khilli's scouts found a community of loggers. Over the generations they had cut their way into the world forest, and had built a veritable city, of wooden buildings roofed with grass turf or moss. This green town was surprisingly populous, and the people lived well, on the meat from the herds of semi-wild cattle they cultivated, and crops purchased from farms on the grasslands to the south, traded for their wood.

Before this journey Elios had only been dimly aware of the place. Accompanying his son on this long military adventure was teaching him the sheer scale of the world—and he was gathering an uneasy sense of just how little of it was even nominally under the Speakerhood's control. Which, of course, was a justification for this long and expensive military adventure in the first place.

Khilli followed his usual practice of sending in senior officers with demands for provisions for his army—horses, food, labor. The elders among the loggers seemed astounded to be asked, and politely refused. The loggers were a major power in their region; they were used to making demands, not meeting them, and to winning wars, not losing them.

So Khilli burned the city.

The holy army set up its camp a little way off the road, in a rare patch of open grassland in a country that was increasingly grown over by the forest blanket. Elios accompanied his son on a quick tour, Elios treading delicately on the raw, trampled earth, nodding to soldiers who as usual tended to their feet and complained about the weather and the food.

Khilli had established a discipline in this as in all things relating to his mission. When the army paused, even for just a few watches, he had his sergeants organize squads to dig out a roughly circular compound with embankments, ditches, latrines, and open drains, while the holy Shuttle Banners fluttered over their heads. Then the men were allowed to set up their tents, build their fires and go hunting and foraging. Elios paused by the small field hospital that tended to the wounded, casualties of the raid on the loggers' town, and reassured the dying that death was not an end, merely a return to the frozen patterns of thoughts in the greater Memory of the Sim.

Then Khilli sat with his father on the porch of their own lavish tent, sharing a stolen flagon of the loggers' rich, dark beer. The flames from the city burned high in a sky that was never bright, so low was the Star, and there was a thick resinous smell in the air.

"I hope that the fire doesn't spread to the wider forest. We'll cook half the world."

Khilli took another slug of beer. "Your Designers surely won't allow their Sim to be wrecked by a bit of fire."

A hardening cynicism about his father's religion was an unwelcome aspect of the remarkable transformation of Khilli in the watches since his sister's abduction. Elios murmured, "You'd better not let your men hear remarks like that. It's only the flag of the Speakers that unites this bunch of soldiers of many nations under your command, remember."

"Duly noted."

"And—was it entirely necessary to burn the city? We're looking for worshippers, remember. The dead don't pay tithes, son."

"We killed very few. Those woodcutters put up a surprisingly good fight, but they were no match for us, when they dared venture out onto the open field. It was the usual one-two, with cavalry and infantry. When the army was broken the city fell quickly . . ."

Since leaving Wilson, Khilli had forged an effective army out of the disparate corps provided by the Speakers' tithe-paying allies. It had been a remarkable sight for Elios to watch as his son the hero, through some forging in the frustration of the long siege of Wilson and the fire of his own anger, had mutated into a general. He had resolved the Wilson siege with a swiftly concluded, if punitive, treaty. Then, listening to the advice provided by his more experienced soldiers, he had spent a whole fifty watches preparing for this expedition: gathering supplies, planning the route from the maps available, forming up his troops into a unified command structure, and training them in battlefield and siege tactics.

And so they had marched, roughly following the trail of Vala and Brod. This was no hasty expedition but a planned, provisioned and thought-out invasion of the interior of Seba, intended to consolidate the Speakers' power across the continent. Even the way the army advanced was designed to awe populations into fearful submission. The troops were solely provisioned by what they could scavenge and seize, and they stripped the landscape they crossed like a swarm of voracious ants. Any who resisted this "liberation tithe" were punished.

Elios believed that Khilli had relished the resistance put up by the loggers; it had been the nearest thing to a full-scale battle he had been able to throw his troops into since they'd left Wilson. And the by-now well-practiced combination of rapid marching, artillery bombardments, cavalry strikes, and advances by determined infantry blocks had proved much too effective for the loggers.

"There was actually more resistance when we entered the city—some of those fires were started by the citizens themselves—but my men were under orders to kill only if unavoidable. So we drove a whole herd of them, women and kids too, off into the forest."

"All save those your men kept back for themselves, I suppose."

Khilli shrugged. "You have to be punitive, father."

"But the butchery of children, the rapes—we can't condone such savagery and you know it."

"Savagery? In fact I make sure that those I spare see enough to tell their neighbors, and their children in the future when they build this place again, how much *more* savage I could have been. After all, it's in all our interests to protect the Integrity of the Sim, isn't it?"

"Don't quote theology at me, boy."

But Khilli showed no remorse at the rebuke, no reaction save a sip of his beer.

Elios often wondered if this transformation of his son had been entirely for the good. His mother, and Vala's, had died young, and Elios, then a mere Scribe, had taken his children with him into the embrace of his church. It was a safe environment, if a restricted one, he supposed, as if you sat on a mountaintop looking down with faint disdain on the rest of mankind. And there were only a restricted number of careers available, all essentially academic—you could become a theologian or an administrator, or if you aspired to Speakerhood you could combine the two.

Neither of Elios's children, both clever in their own ways, had turned out to have the patience for study, which blocked off many options. At least Elios had found a role for Vala; beautiful and vain, she had seemed an ideal candidate for the pampered virginal life of a Sapphire, meant to embody the idealized perfection of humanity that resided in the heads of the Designers. With Khilli it had been more difficult. Physically powerful and headstrong, he had been coached by his father in a

cut-down and simplified version of the faith—and he had been trained to use his muscle and his aggressive instincts to protect his father, and most especially his delicate sister.

Well, Elios admitted ruefully, it had all gone wrong in the end. Even Vala, wily and manipulative, had evidently rejected the career her father had selected for her; Elios was sure she wouldn't have let herself be taken anywhere she didn't want to go, although he wouldn't have expressed this to his son. And Khilli, as soon as he had got a taste of true combat, had discovered the soldier inside himself, and had set off on this global rampage. Perhaps if their mother had survived, she might have developed a gentleness in Vala, a more controlled temper in Khilli . . . But she had not. And all that was now unfolding, Elios supposed, was his responsibility. Or his fault, if it went badly enough wrong.

Perhaps it might still turn out well. He knew from communication through runners that his subordinate Speakers were delighted with the progress of the force so far, and with the slowly increasing streams of tithes that were already flowing into the Navel. But as he watched the city burn, a city whose existence he had been barely aware of a few watches ago, Elios wondered how long this march of destruction and submission would continue, and what would become of them all, and the world, when it was done.

And he wondered about the hardening of Khilli's heart.

X

With time Tripp's small party passed beyond the northern boundary of the forest strip, and the carts trundled over a new, open landscape of sparse grasses, mosses, lichens, and small, windblown trees. Tripp called this a tundra, another belt of flora and fauna types that stretched around the world's landmasses. Here and there you saw Slime, puddles of it in dips and hollows and on rock faces, like darkness poking through the world's wearing-away skin. There were few people to be seen here, only an occasional collection of dome-like huts of animal skin. Tripp said the people hunted a kind of wild sheep, grown large and long-legged with long horns and a thick wiry coat. But Brod never saw one of these exotic animals, as he peered into a horizon that was more often than not laced by grey mist.

Now more than two hundred watches into the march north since they had left Wilson, they had all changed, Brod thought—all save Astiv Pellt, who was as stolid, silent, and cheerfully grinning as ever. Even Tripp seemed more withdrawn, more inwardly reflective.

Vala had gone through phases of adjustment. Her early quick interest in the unfolding world around her had dissipated in irritation at her inability to keep her skin clean, her hair coiffured, her nails shaped as she was used to, and she got bored with "Tripp's endless lecturing, Astiv's stupid silences, and Brod's adolescent sniffing around me," as she brutally put it one watch. For a time none of them dared speak for fear of setting off another tantrum. In an odd way, Brod came to see, though Tripp was the nominal leader of the expedition, Vala was always in control—of their emotions, of their smiles and frowns.

She had come out of that phase too, and now rode steadily and silently with the rest, and did her share of the chores and sometimes more, and she started to ask Tripp questions again. She was growing up, Brod thought.

But that wasn't a comfortable thought, for it meant she might be growing away from him, after he had given up his whole world for this girl. And he increasingly wondered how much of the decision to flee Wilson had actually been his to make.

On the tundra stretched, for watch after watch, and in one gloomy village after another children in grimy skins with big dark pupils came out to see them go by.

"You know," Brod ventured, "I don't think I've seen anybody crack a smile since we came north of that forest. Nobody except Astiv, and he's an idiot."

Tripp said, "It's not surprising. Look how low the Star is, how murky the light. It's rarely brighter than this—and it's not bright enough for people, despite the big wide pupils of the children."

"It makes you gloomy," Vala said.

"Exactly. Some of these huts and tents are brightly lit inside, which helps a little. It gets worse at the Pole; with the dark forever at our backs, we get more than our share of suicides."

"But you were never tempted," Brod said dryly.

Tripp smiled. "Oh, for the thinking person the world is much too rich to leave early. And besides, there are always the lesser stars, treasures forever hidden from you at the Equator—just wait and see. The problem is that our world is changeless, Brod. A diorama studded with obvious significant points, like the Substellar and the Antistellar and the Poles. A world where the conditions for living things, including people, are fixed forever by one single parameter, the angular distance from the Substellar point. A world where your fate is forever determined by where you happened to be born."

"You could always travel," Vala said sensibly. "You could always move, as we are."

"Very few do," Tripp said. "The teaching of your church, that you are created just where the Sim Designers intended you to be, has something to do with that, no doubt. But I think that feeds on a certain lassitude in the spirit of humanity here. A feeling of helplessness in the face of the vast celestial machinery we inhabit."

This conversation of predestination, despair, and suicide soon fizzled out, leaving Brod rather relieved, and he retreated into dreams of raids across Star-bright seas.

Still they ploughed further north, watch after watch, across an increasingly empty and desolate terrain.

And then the landscape began to change again. There was more snow, for one thing, which they'd suffered on and off since the boreal forest. Now it pooled and drifted in a landscape of sandstone bluffs carved by wind and shattered by frost. There was less green to be seen now, and what there was amounted to no more than mosses or lichens, mostly gathering around clumps of photomoss, evidently feeding off its light.

Tripp pointed to this as a rare example of symbiosis between species from entirely different biospheres. "They can't eat each other, but they can cooperate, in their unthinking way; the photomoss feeds the green things with light, and they in turn break up the rock to give the moss a place to grow . . ." Brod barely understood any of this, and cared less.

And, above all, there was the Slime, a black slick that coated swathes of the bare rock face. There came a rest stop when Brod became aware that there was nothing around him but rock and snow and ice and Slime—nothing associated with humanity save the four people themselves, and their carts and animals.

"I've never been a deep thinker," he admitted.

Vala guffawed, but Tripp touched her arm, and she quieted.

Brod went on hesitantly, "I suppose I've always grown up believing in the Sim and the Designers and the Controllers. It was an easy story to understand, and it was what everybody else seemed to believe. But I can't see why any Sim would have all this deadness in it. What's the point? Let alone *them*." And he pointed up to an increasingly star-cluttered sky.

Tripp nodded sagely. "We'll make a scientist of you yet."

"By the Controllers' mercy, I hope not!"

The Polar punched his arm playfully; he barely felt it through his thick padded coat. "Oh, come on! With the eyes of a scientist, you see so much more. What do you think, Vala?"

"I think," said Vala, "that I see a light." She pointed north.

They all turned to see. There indeed was a light, right at the northern horizon, a flickering spark.

Tripp took out a small pocket telescope and snapped it open. "That's photomoss light, backed up by a bonfire. It's the Pole! We're there! Come on . . ."

And they encouraged the horses to take a few more weary steps over the frozen ground.

XI

They halted a couple of kilometers short of the Polar citadel. Brod, Vala, and Astiv huddled for warmth in their covered cart, stinking of icy fur and the grease they smeared on their faces to keep out the cold, while Tripp went ahead to negotiate entry. She'd said, "We came fast, but I'll bet the news of Khilli's campaign will have moved faster yet. I'll make sure they know who we are, and let us in."

So Brod and Vala had time to consider the enigmatic Substrate structure Tripp had called the Pivot.

It was like the Eye on the Navel, said Vala, in that it was a cylindrical pillar, though this one tapered inwards at the top, and appeared to contain no structure like the Eye mirror, according to Astiv. But unlike the Eye, which was surrounded by a human-built basalt wall on a mound crusted over with temples, this Pivot stood proud and alone, towering over the shabby human structures at its feet. Some of these hut-like buildings were actually igloos, said Astiv Pellt, built of blocks of old ice. Humans here didn't have the energy to challenge the ancient architecture.

"Look," Vala whispered to Brod, pointing. "They look like birds. In those trees."

The "trees," they learned from Astiv, were related to the photomoss and other engineered forms. You could find them in a thin belt all along the Terminator, the un-moving boundary between light and dark. Some of them were even rooted in the perpetual shadow; just so long as their uppermost branches saw the Starlight, that was enough. Their trunks were coated with photomoss—and their "leaves" were actually mirror-birds, who gathered the light with their wings to feed the trees, on which they fed in turn. Every so often something would disturb the birds, and they fluttered up, their wings sparkling with pink-white light, before finding a fresh branch to land on. It was an entrancing sight against the black star-strewn sky behind them.

At last Tripp came stumping back down the road. She clambered into the cart, frost thick on her coat. "They won't let us in," she announced.

After such a journey, this was incomprehensible to Brod. "What? Why not?"

Tripp pointed south. "Because of your friend Khilli, that's why. I told you news travels fast. And the news is that Khilli is coming, and not with some light force but a whole army."

"It's too far," Brod said. "Surely."

"No," Vala said. "My father always spoke of the need to deal with the Pole some time. Maybe he's decided this is the time."

"But the elders don't want to have to face the Speakerhood—not yet," Tripp said thoughtfully. "Give us another few Great Years and we will ride out to meet those footslogging soldiers in our armored motors . . . But not yet. And not over you two. They want you gone from here, so Khilli can search as he likes and find no trace of you—even witnesses who saw you. At least that should minimize the damage."

Vala looked at Brod, and he grabbed her mittened hand. "But what are we to do?" Vala asked. "Die out here in the cold? Wait for Khilli and give ourselves up?"

Tripp said, "There's a third way. The elders are prepared to provide horses, fresh provisions—"

Brod said, "So we could run. But where? Everywhere is south from here."

Tripp grinned. "But there's more than one destination south."

And Brod saw it. "You're talking about making for the Antistellar, aren't you? The middle of Darkside."

Vala was horrified. "Another journey as long as the one we've made—and without the Starlight at all?"

Tripp began to explain how the journey would be perfectly survivable, but Brod interrupted. "This has been your dream all along, hasn't it, Polar? Everything else we've been through is just an excuse to do this—is that the story?"

"Not at all," she said mildly. "It certainly isn't the way I planned to do it. I came to your mother, Brod, to propose a joint expedition, properly equipped. But this mad dash is better than none at all, in this interval of volcanic mildness. At the minimum Darkside is a place to hide, until Khilli has lost his enthusiasm for the chase—or more likely his army, having reached the end of the world, starts agitating to go home. And at maximum—who knows what we'll find? Who knows what advantage we might gain?" She looked at them all, one by one. "You're with me, aren't you, Astiv? I know you—never happier than when you're on the road. Well, here's a road never traveled before. And you, Vala, Brod? Do you want to just give up? Do you want to run and hide? Or do you want to do what you said you'd do, and make history—to have your names remembered for all time, like Helen Gray? Well? What's it to be?"

Of course there was no real argument. But still they had to wait for three watches while both Tripp and Astiv visited the station, to pick up supplies and to immerse themselves briefly in the tangled affairs of their extended, polygamous families, before they set off again.

XII

Another journey, another three hundred watches, each to be counted out by the turning of the big hourglasses mounted in Tripp's covered carts. And yet now they moved through a world that was its own clock, for with the Star forever invisible below the horizon the pinpoint lesser stars wheeled above them in a cycle that lasted forty-five watches, the length of this world's day, and its year.

Vala was entranced, and sketched the distinctive patterns the stars made, and tried to measure the time it took them to return to the same position in the sky. Tripp encouraged her. Brod could only look at Vala's uplifted face, with the air misted by her warm breath, and try to conceal his own helpless longings.

If Vala was adapting to this strange new life, Brod was increasingly sunk in misery. What did he care for the silent stars?—even if humans might have come from one of them. They were cold and remote and abstract, worse even than the frozen world across which he traveled. And what did he care for the Antistellar monument, if it existed at all, that was their goal? It would just be another heap of incomprehensible Substrate antiquity, irrelevant to his life.

He threw himself into the details of the expedition. There at least he could add some value. He liked working alongside Astiv Pellt, who had stuck with Tripp and her two southerners as they swept on past the Pole station; Astiv, dogged and silent despite his habitual broken-toothed grinning, was the glue that held this expedition together.

Once again they had their two wagons, each with thick covers and newly laden with salted and dried supplies. Their fresh horses, this time four teams for additional redundancy, were unlike any Brod had seen before: ponies really, stocky, round-bodied and covered with thick hair, they were a breed that had been developed by the Polars to be capable of withstanding long periods in the dark and cold lands beyond the Terminator. They even had special spiked iron shoes to be nailed to their hooves if they had to cross bare ice fields. But a part of the plan, unspoken but apparent to Brod, was that not all the ponies might survive the return journey, sacrificing themselves for the sake of their flesh to feed their fellows or their human passengers. So, as he helped Astiv feed and water them, Brod did his best not to become too attached to the animals.

Supplies were always going to be a challenge. They would melt ice for water, but nothing living—and, more to the point, edible—was expected to be found in the frozen landscapes of Darkside. Tripp patiently explained that just as in normal times the warmth trapped and transported by the air of Earth III stopped the atmosphere itself freezing out on Darkside, so the massive volcanic eruption in the south had injected so much soot, ash, and gas into the air that the whole world was warmed above the long-term averages, even the sunless hemisphere. The temperature would never fall so low as to be lethal for humans—if they took appropriate precautions—*probably*. But they could not expect to find anything living, for plants depended on the Star's light as much as its heat, and animals depended on plants for fodder.

During an early rest stop, with the four of them huddling in a cart by the light of a photomoss lantern, Tripp described how she intended to reach the Antistellar—a journey she had been planning for many Great Years. She took them through sketch maps of the configuration of the continents and oceans of Darkside. These were largely guesswork, based on oral lore and scraps of Helen Gray's journal that described surveys compiled from space before Landfall.

"You can see that much of the northern half of the hemisphere is dominated by this continent, which is an extension of Seba. In the south you have these scattered islands, set in a sea that's largely covered by pack ice. Around the Antistellar, where the world is coldest, you have this ice cap. But there's a massive mountain range, it seems, at the Antistellar itself. And we believe the Antistellar Substrate monument will be somewhere in that, clear of the ice. The existence of the mountains themselves may have something to do with their unique position, opposite the Star, perhaps the result of tidal flexing. . . ."

Brod understood none of this, and ignored the questions Vala asked.

Tripp traced their planned route with her forefinger. "There's supposed to be a frozen lake, a massive one, just *here*. An inland sea, really. So we will skirt to the east of it, as we head generally south. And I intend that we should follow this valley *here*." It was a monumental trench that spanned thousands of kilometers.

Vala was fascinated. "A mighty river must have carved this valley."

Tripp smiled. "A river of molten rock. Helen says this is a place where the continent is splitting apart at the seams. Earth III is evidently active in this regard. And you can imagine that such a wound in the world will be warmer than the general landscape, which should help us. . . ."

She spoke of how the continents on Earth III slid about on a deeper liquid layer like scum on stagnant water; at times the currents could break the continents up, or smash them together—whole continents! Brod had a hard time imagining the land, which he had always taken as a fixed backdrop to the drama of human life, as itself undergoing evolution, change, and growth.

But all this speculation made no difference as they pressed on with their journey, a steady progression into eerie darkness, across a landscape frozen bone-hard and illu-

minated by strips of photomoss on their wagons and by the stars above, when the sky was clear. Everything was strange in the near-dark, distances swimming and hard to judge, the shadows thick and black and threatening, and the only noises in all the world were the clank of the horses' hooves on the ground, and their own soft voices.

Perhaps the strangest discovery they made was evidence of frozen life. They stumbled across banks of what might have been photomoss, or the trunks of mirror-bird trees, and Slime carpets—even what appeared to be the relics of animals, desiccated and twisted and frozen to the ground by ice like concrete. These were creatures none of them recognized.

"How is this possible?" Tripp asked, as if speaking to herself. "Can these be relics of previous expeditions? No, surely not, for it is all far too extensive. Somehow these creatures lived here, and grew, and died—perhaps long ago. But *how*? No light from the Star can reach this place; the other stars are too remote, their light too feeble . . ."

The deep mystery of these mute corpses troubled her, and Brod found he was obscurely pleased. The Polar was far too smug, in his opinion, far too quick with her explanations of the world. It was refreshing to see her as baffled, at least for a while, as he was most of the time.

Soon they came to the rift valley, and followed it, though with caution. Yes, it appeared to be warmer than the surrounding landscape, but it was filled with features very strange to Brod: lakes of bubbling mud that gave off stinking, choking gases, fields of distorted formations crusted red and yellow in the pale photomoss light, even plains of white rock that looked like ice, but was in fact salt. Tripp explained that this was a new landscape being formed by minerals escaping from the bowels of the earth—and the salt plains may have been left behind by incursions of the ocean into this deep wound. Brod concentrated on the practicalities, such as ensuring the stocky Polar ponies did not drag them all into some stinking, bubbling pool of lethal mud.

As the watches wore by in the endless dark they all became subdued. But Brod in particular felt a deepening disappointment, that could shade into despair—as if he had set himself on the wrong road, a path he could not now turn off.

His relationship with Vala, or the lack of one, was surely the key to that. What had really united them had always been the physical stuff, the sex. Even on the long haul to the Pole they had been able to enjoy each other. But there was no chance of that now. Even when they found themselves alone, tucked up in one of the carts while Tripp and Astiv took the other, they rarely felt like exposing enough flesh to the cold to make any meaningful contact. And, Brod knew, the estrangement between them went deeper than that. Vala just didn't show any interest in him any more. Whereas he missed home desperately, she was fascinated by the newness of the world she was discovering. Out of place, he was sunk in misery; while her mind, which had been locked down in her role as a Sapphire, was opening like a flower.

The idea that the whole jaunt beyond the Pole might be futile nagged at him, too. Yes, they were off to explore the Antistellar, and that had always been Tripp's goal. But they were also supposed to be fleeing Khilli. Was it really plausible that even such an obsessive as Khilli would pursue them beyond the Terminator? Were they fleeing phantoms?

These were questions that didn't seem to occur to the others. So he developed a habit of trying to find a scrap of high ground, every few watches, and looking back the way they had come, seeking signs of pursuit. He borrowed Tripp's pocket telescope to help with the seeing. He found nothing, in one vigil after another. He wondered if he was wasting his time, even in this.

Then, as he stood alone in the deep dark cold, he saw a light, a pinpoint, like a star but fallen to the ground, crawling slowly but steadily across the landscape. He said nothing to the others. But after that he doubled the frequency of his watches.

And he dug his weapons out from the depths of their stores. He tried firing his muskets, seeing if the cold affected the powder or the guns' mechanisms. And he practiced using sword and spear, club and knife, while swathed in his heavy Dark-side clothing.

XIII

““T he Galaxy is old . . .”

Sitting alone in his son's carriage, comfortable in a lightweight simulacrum of the Left Hand Seat, Elios, Speaker of Speakers, was warm despite the chill darkness inside, with his blazing iron stove and cocooned by walls lined with padded tapestries. The light from the photomoss strips was bright enough for him to read. And, as he preferred, he read aloud, his finger following the spidery, much-copied text, trying to pick out meaning from a string of archaic words, many of which he was entirely unfamiliar with.

“As the Galaxy formed from a vast, spinning cloud of dust and gas and ice, embedded in a greater pocket of dark matter, the first stars congealed like frost. In the primordial cloud there wasn't much of anything except hydrogen and helium, the elements that had emerged from the Big Bang. Those first stars, mostly crowded in the Galaxy's center, were monsters. They raced through fusion chain reactions and detonated in supernovas, spewing out metals and carbon and oxygen and the other heavy elements necessary for life—at any rate, life like ours. The supernovas in turn set off a wave of starmaking in the regions outside the core, and those second stars were enriched by the products of the first . . .”

The heavy drapes that covered the entrance to the carriage were pushed aside, and Khilli shoved his way in. He was a bundle of black fur, bold, stern. Without a word he began to drag his outer clothing off. Beneath, he wore armor of polished leather reinforced with metal plates—not the warmest combination, and an outfit that had at first seemed excessively cautious to Elios, given how far they were from any likely foe, but he had come to understand that Khilli feared a treacherous backstabbing from among his own ranks.

Elios clutched his papers to his chest and waved a hand at his son. “Oh, shut that flap, in the name of the Designers; you're letting out all the heat—as usual.”

Khilli pushed closed the flap, but he snarled, “Still lying around reading, are you? You might feel warmer if you got off your leathery arse and did some work.”

Elios pursed his lips, but otherwise did not react. This kind of arrogant cheek was all too typical now. The boy was becoming too aggressive, too independent; he would have to be dealt with, ultimately. But not now—not here. “I take it from your relative good temper that all is going well.”

“It could be worse.” Khilli sat on a couch, and rummaged for food, a flagon of beer. “Two ponies lost in the last three-watch. One man down—fell into one of those poison lakes. The next peel-off is due in ten more watches. We're on schedule . . .”

Elios was sure that this was the truth. Despite the gathering tension between them, the Speaker of Speakers had felt able to relax in the growing competence of his son's generalship.

It had already been a remarkable achievement for Khilli to deliver enough physical force to the Pole of the world to intimidate the inhabitants of that remote place. With none too subtle threats, Khilli had been able to force the Polars to hand over the provisions he needed for his ongoing pursuit, notably wagons and a whole herd of their sturdy cold-resistant ponies. And with their antique sketch maps, scraps fascinating to Elios, the elders had been able to show Khilli the likely route Tripp would take, following the rift valley to the equator of Darkside.

Khilli had planned his mission with ruthless competence. Not for him a risky dash with a couple of carriages and a few sacks of salted meat—but he understood that his strategy of foraging and thieving his way across the landscape would not work on Darkside. So, enlisting his father's help with the numbers, he planned an elaborate sequence of deliveries and stages, like several expeditions folded into one. Having established his route, he sent carriages off early to make supply drops. Then, when he was ready to depart, he took a fleet of carriages with him, all laden with provisions, all in support of a key core force. At preplanned stages a number of these carriages would "peel off," in the language he and his officers developed, to dash back to the Pole leaving the survivors laden with fresh supplies. And, so far, it was working. Khilli had enough fat in his budget to cover losses to hazards like the strange mineral fields of the rift valley; even one fully laden wagon wrecked in a crevasse in a salt lake had not stopped him.

And Elios, having stood atop the Substrate monument the Polars called the Pivot, and having peered up at wheeling stars forever invisible from the bright equatorial location of the Navel, could not resist the temptation to come with his son. The Speaker of Speakers had, after all, pretensions to rule the whole world. He had seen enough during his expedition to the Pole to accept that he knew far too little of the planet he lived on to justify any such claim. How could he turn away from glimpsing its hidden side? When would he get another chance—or any Speaker in the future, come to that?

So, while Khilli tended to his men with his noisy mixture of boisterous encouragement and ostentatious punishment, and while the soldiers complained of the cold and the food and their aching feet and their piles, Elios studied the strange chimneys of discolored rock that lined the steaming mud pools, and wondered at the transient ocean that must have deposited these lakes of abandoned salt, and he watched the stars turn overhead.

And he had brought with him fragments of the past.

Following a thread of curiosity provoked by the Polars' maps, he had ordered the elders to show him any more documents they had relating to the earliest times. The elders had been reluctant, but in the end they produced pages that seemed to complement the scraps Elios had seen of the document that had come to be known as Helen Gray's "Venus legacy." Despite Khilli's ever-present aggression the elders would not let these fragments out of their sight, but they did allow Elios's clerks to transcribe copies hurriedly.

Now Khilli, with his mouth stuffed full of horsemeat pie, snatched a page from his father's hand, and read slowly, his voice muffled by the food. "So you have this zone of intense activity in the center of the Galaxy, and a wave of starmaking washing outward, with metals and other heavy elements borne on the shock front. That starbirth wave finally broke over the sun's region maybe five billion years ago. But Sol is out in the boondocks, and we were born late . . ." He glared at his father. "What is this garbage?"

Elios took the page back delicately. "It's supposedly a record, written down by Helen Gray, of a conversation she remembered with a woman called Venus who used her voyage through space to study the worlds and the stars."

"And what's a 'year'?"

"The same as a Great Year—I think."

Khilli scoffed. "Doesn't matter anyhow. All fairy stories."

"Maybe. Just listen . . . The Galaxy's starmaking peak was billions of years earlier. Most stars capable of bearing planets with complex life are older than Sol, an average of two billion years older. That's maybe four times as long as it has been since multicellular life emerged on Earth. Perhaps this is why we see no signs of extant intelligence. *They* were most likely to emerge billions of years before us."

Khilli frowned. "What's a billion?"

"A lot. Whatever, after a billion years, they're nothing like us, and they're not *here*. If we expected to come out here and join in some kind of bustling Galactic culture, it ain't going to happen. We seem to be young, in a very old Galaxy. We're like kids tiptoeing through a ruined mansion. Or a graveyard . . ."

Khilli twisted his face. "What difference does any of this make to us?"

Elios put down the pages. "It's clear we forgot, as a people, almost everything we once knew about this world, and any others that might exist. Maybe Tripp and the rest of the Polars are right to try to preserve this stuff." He returned his son's glare. "Knowledge is power. If we let the knowledge that's hinted at in these scraps fall into somebody else's hands, we might regret it."

Khilli sneered, took a knife from a sheath at his waist, and ostentatiously began to polish it. "*This* is power."

"But that blade was made by some Polar metal-worker! I think you're proving my point, in your thuggish way."

"Oh, am I? Here's another point to make, then. You are the Speaker of Speakers, indulging in heresy by going on about Helen Gray and journeys into space. None of this is real, remember? Everything we see is an artifact of the Designers' plans. We understand only what they need us to understand. Isn't that what you're supposed to believe?"

Elios frowned, facing him. "Listen, son—nobody intelligent enough to observe the world around them, and educated enough to interpret it, can fail to have doubts about our creed, or at least our understanding of it—and there's the paradox, that the most educated and intelligent of all are to be found among the Speakers, at the heart of the faith. In my position it's perfectly reasonable to believe two things at once. I can firmly believe in the validity of my religion, while at the same time opening my eyes to the reality of its contradictions. That may seem cynical to you, but I could scarcely wield the power I do without seeing the limits of the faith I administer—or, you could say more respectably, those aspects of it we have yet to understand. And power is what it's all about, isn't it? If you observe me, you'll find there's plenty for you to learn."

Somewhat to Elios's surprise, Khilli nodded. "Oh, I know, father. I listen to you, and I learn, believe me. After all, I have to learn from you if I'm eventually to take your place, haven't I? Now if you'll excuse me, I've had my eye on one of the whores we brought from the Pole . . ."

He pushed his way out of the carriage, and the cold air ruffled the sheets of Helen's journal, and his father was left open-mouthed with shock.

XIV

The ice cap that straddled the Antistellar point was smooth and all but featureless—an abstraction, a perfect plain under the wheeling stars.

Wearing their spiked shoes, the horses made good time over this surface, huffing, panting, and snorting, their breath steaming in the still, frigid air. There was little loose snow. Tripp said she thought precipitation must be low here, and that the ice was very old. And, near the center of the cap, the ice was stable, intact and worn smooth by the wind, unlike the broken and crumpled landscape they had seen at the rim of the cap, where glaciers calved and shattered. But it was a numbing, empty landscape to cross. It was almost a relief for Brod when his gaze was caught by a crevasse, and he was able to shout a warning and change their course—to *do* something.

As they approached the Antistellar, Tripp had to refine her navigation. She had instruments of wood, steel, and glass that she used to measure the stars' trajectories, and so work out precisely where she was.

Soon they came upon the mountain range she had promised, blocky lumps of granite that protruded roughly from the ice, their grey flanks carved by glaciers and streaked white with ice. This range itself spanned hundreds of kilometers, but Tripp was growing confident with her stellar navigation, and she led them through passes in search of her goal. When they paused for sleep watches, Brod found it comforting to be surrounded by the mountains' silent, brooding flanks, rather than to be sat out exposed on the tabletop-smooth ice plain. At least there was cover if—when—Khilli came calling.

And at last, a full fifteen watches after entering the mountain range, Tripp led them through one last pass, and they all knew, unmistakably, that they had reached the Substellar point. Cradled by the mountains that stood tall and silent around it, the monument, clear of ice, was mounted on a stubby hillock that looked as if it had been deliberately shaved off to provide a platform.

Tripp could not bear to wait a moment, to have a single hour's rest, before hurrying ahead to inspect her discovery. Astiv Pellt insisted on coming with her, much to Tripp's annoyance. "Don't fuss, man!" And Vala was just as eager as Tripp was. Astiv made her promise to proceed with proper care; it would be absurd to fall and break her neck a dozen paces short of the discovery of the age.

And if Vala, Tripp, and Astiv were all going ahead, that left only Brod to tend the horses. That suited him; he wasn't much interested in monuments, and was more concerned with watching their backs.

But Tripp approached him with some embarrassment. "You've come all this way," she said. "I do know what young men are like—the bragging they do—how they like to be first to the target. In at the kill, so to speak."

"I can wait. The monument's been there a long time. It will still be there next watch."

She grinned. "Of course it will." That duty done, she gave in to her own eagerness and hurried off.

The hillock's walls were steep and glinted with ice in the starlight. Vala had already begun her ascent.

And before Tripp reached the slope she passed Astiv, coming the other way. "Ladder," he said shortly.

Once Tripp had begun the climb, only maybe thirty meters to the broad summit of the hillock, she found the slopes were slick with ice and eroded, but they were rough enough that climbing them wasn't too difficult, as long as she took care where she placed her feet and hands.

At last she stood on the hillock's flattened top—and it *was* flat, she saw immediately, dead level, more like a frozen pool than anything made of rock. Obviously artificial. Vala was waiting for her here, smiling from ear to ear. The girl held out a mitened hand to Tripp.

Then, hand in hand, they approached the Antistellar monument. It was a cylinder, set on the hillock and tapering slightly as it rose over their heads.

Vala breathed, "So what do you think?"

"I—" Tripp waved her hands. "It's wonderful. It's magnificent. We found it! Yet it's just like the structure at the Substellar, if you stripped away all the human clutter there, and indeed at the Pole. Maybe I was hoping for something a bit more spectacular." Which would have seemed a fitting reward for undertaking such a journey, a full half-circumference of the whole world since the Navel—but that was a petty thought, and unscientific.

"Do you think there might be another Eye in the top? Another mirror, like on the Navel?"

"I don't know. As soon as Astiv shows up with the ladder we can go see."

"I suppose it really is the same size as the others." Vala strode forward to the column, touched its surface reverently with one mittened hand, and began to pace around it boldly. "One, two, three . . ."

Tripp smiled, pleased. She'd been trying to imbue scientific instincts into the girl since they had met, and she had perceived a raw intellect under all the vanity and silliness. Measure—always measure! She walked up to the monument herself, and began to count out her own paces, moving clockwise while Vala went anticlockwise. The silent stars watched as they walked and counted. By the time they had done, they found their counts differed by only a couple of paces, easily explained by their differing lengths of stride, and they promised to measure it properly later.

"But, yes," Vala concluded, "it has the same dimensions as the Eye tower, and the Pivot."

"Here comes Astiv with his ladder."

It took only a moment for them to set up the fold-out wooden ladder and prop it against the tower's side. Without asking permission Vala immediately leapt onto it and began to clamber up, a bundle of dark fur, her legs working vigorously. Tripp glanced at Astiv and shrugged. More cautiously, the two of them followed the girl.

Vala was standing at the lip of a bowl of darkness. "Take it easy," she said. "The edge here is rough, but it's not as secure as the wooden path we laid around our Eye."

Tripp stepped off the ladder and stood with Astiv, their breaths steaming as they panted after the climb in their heavy coats. Astiv dug a roll of photomoss out of his coat and draped it over the wall, and its soft glow enhanced the starlight. And they peered into the bowl of darkness contained within the tower's cylindrical wall.

Tripp said, "It does look like another Eye, doesn't it?" She knelt down. The bowl was coated with a black substance that crumbled as she touched it. "Slime—long dead and freeze-dried. Quite a thickness of it, though."

Vala jumped down into the bowl, her lack of caution making Tripp's heart pound a little harder, and she began to rip up the Slime enthusiastically. The surface beneath was smooth and full of stars, a mirrored surface that looked at first glance as flawless as the one on the Navel.

"Another mystery," Tripp murmured to Astiv. "Evidently Slime grew over the mirror. How? Where did it get the light to grow?"

Astiv shrugged. "Why ask me? I just mind the horses. Seems to me you came all this way for answers—"

"And all I found was more questions. All right, all right."

Vala was tearing up great swathes of the dead Slime. "Come on, you two, help me. This stuff's easy to shift. We could get the mirror clear quickly, if we all work at it."

"Why?" Astiv asked practically.

"Well, why not?"

Astiv grinned. "I do like that girl." He jumped down into the bowl, landed on his backside and slid in a great shower of black flakes. He got to his feet and began pulling away the Slime methodically, rolling it up like carpet and throwing it over the lip of the tower.

With a sigh, Tripp herself stepped down, more cautiously, and joined in. The Slime was so old and desiccated it came away easily.

"Tell me about the Slime," Vala said. "The fact that it lies on top of the tower means it came after the tower was built. Isn't that right?"

"Yes. But the Slime itself has been here a long time."

"How long?"

"I'll give you the answer we worked out from Helen Gray's writings. Four hundred and fifty million Great Years. That's when the Slime first appeared on this world. Before that there were only simple single-celled life forms of its kind."

"Its kind. Which is carbon and water and nitrogen—"

"Life more or less like us, yes." Tripp was already tiring, and she sat on a bank of the Slime. But Astiv and Vala, more vigorous, were quickly clearing a wide area of this Antistellar Eye. "I'll tell you two other strange things. Helen says that that date, four hundred and fifty million Great Years ago, is about the same time multicellular life of our kind appeared on Earth I—which may be the world she came from. And the time it appeared on Earth II—which may be a world she visited."

"Really? Wow."

"All these forms are different in detail, you understand. But the basic reality of that uplift, from single-celled to multicellular forms, happened on all three worlds about the same time—and to the same sort of life forms, carbon and water and nitrogen. And I'll tell you something else. We have spectroscopes—devices that split up the starlight, and let you see what remote stars and worlds are made of . . ." She kicked the Slime. "We have detected photosynthesis of this sort, of our carbon-water sort, on other worlds, orbiting other stars, in *that* direction." She pointed at the starry sky. "But none in the *other* direction." She pointed that way. "Now, what does all that suggest to you?"

Vala kept on clearing the dead slime, breathing harder. "That somebody set this off deliberately. Four hundred and fifty million Great Years ago, somebody came sweeping through the star systems, and, where they found traces of carbon-water life, uplifted it to multicellular forms. They did it on Earth I and Earth II and Earth III. Maybe it was an expedition, like Helen's. Or maybe it was a war of conquest, an invasion, like Khilli's. But this was as far as they got."

"Yes," Tripp said. "Wonderful thought, isn't it? A war of the life architectures. But there was somebody here already. Whoever built the Substrate, the monuments like this."

Vala said, "So maybe they got displaced by the carbon-water creatures. They lost the war. Who knows? It's all such a long time ago."

We seem to be young, in a very old Galaxy. We're like kids tiptoeing through a ruined mansion. Or a graveyard . . . Or a battlefield. Humans built their lives amid the relics of monumental wars long ago fought to a conclusion—wars that had left bubbles of inimical life forms scattered through the Galaxy.

"Look, we've got more than half clear now," Vala said. "I think it's reflecting the starlight!" She raised a handful of Slime dust in the air, and let it drift around her; it caught a sparking, misty beam, barely visible. "Come on, help me clear the rest. . . ."

Tripp heard a shout. Perhaps Astiv Pellt heard it, too; he turned, frowning. But Tripp's head was too full of marvelous, strange ideas to be concerned about that. With renewed eagerness, hungry to know what would happen next, she ripped into the remaining Slime with new determination.

And she thought she saw a shadow beneath her, vaguely defined, as if cast by a source of diffuse light far above.

XV

A single carriage came rolling through the final pass to the monument, covered in canvas and grander than either of Tripp's carts, and pulled by four weary-looking horses. It had a single driver, bundled in furs, and the way was lit by a strip of photomoss fixed to an arched frontage. It stopped some way short of Tripp's carts, which weren't even unpacked properly, such had been the haste of the others to climb the monument.

Brod considered calling Tripp and the others, giving them some warning.

Instead he walked forward, checking his weapons, the blade in one deep pocket, the musket in the other. His blood was pumping, his attention focused, his spirits as high as they had been for many long watches. The challenge had come, and he relished it. Meeting challenges was what he was *for*; that was what he had inherited from the brave pioneers who had crossed space to come to this world—or had had programmed into him by the Sim Designers in Holy Vegas, depending on what you believed, and right now he didn't care—and this was his moment.

As he approached the wagon the driver didn't dismount. Brod couldn't even see his face, and the man, or woman, seemed determined not to react to his presence. Even the horses, breathing steam, showed more interest. But it was obvious he wasn't to be challenged from that quarter.

He walked around the wagon. It was sealed tight, the canvas pinned firmly in place, and he thought he could feel the warmth leaking from it. His enemy traveled in comfort, then.

He was ready.

He stood back from the wagon and bellowed. "*Khilli! Khilli son of Elios! I am Brod son of Maryam! Come out here and meet me—or skulk in your cart like the coward you are. . . !*"

A flap pushed open at the back of the wagon, and two men clambered out. One was stocky, dark-clad, a blade already in his hand, his head covered by a hood. The other was taller, slimmer, moved more stiffly, and, though clad in a heavy cloak, he shivered at the stab of the Antistellar cold.

Brod drew his musket and his blade, a stabbing-sword that was shorter than his opponent's, and stepped forward. "Khilli. I'm flattered you came all this way."

Khilli pushed his hood back to expose a shaven head, and a scar on his cheek that was livid even by the light of the stars. "Don't be. I came to clean the world of a stain, kidnapper, rapist. Since you wouldn't stand and fight before."

"I fled from your army, not from you—and I saved your sister from *you*, animal. And besides—here I am now, standing alone. Or have you brought your daddy to back you up?"

The other man slipped his own hood back from his shaven head. It was Elios, Speaker of Speakers, as Brod had suspected. "I have come only to observe." Elios sounded tired, almost wistful.

But Brod cared little for the Speaker's mood. "To observe what, the death of your son?"

"The conclusion of this, Brod. This strange affair that began the whole diameter of the world away. At least it will end here."

"And somebody's going to die," Khilli said. "Then when my forces arrive we will tear down yon monument, as it should have been demolished long ago, and leave the world with only a single righteous focus of worship—the Navel."

There was a flare of light from above, bright enough to be dazzling. Brod glanced toward the monument, distracted.

And in that instant Khilli hurled himself forward. Brod raised his musket, but Khilli's blade flashed, slicing away the musket before it could be fired, and two joints of Brod's trigger finger with it. Brod cried out, and blood pumped; he staggered backward, out of Khilli's reach, and curled his fist into a ball to try to staunch the bleeding.

Khilli stood back, laughing. "One encounter, one blow and you have already lost your main weapon, and the use of your good hand. Give it up, rapist. Kneel before me and suck on my sword. I'll be quick—you'll hardly notice it's inside you—"

Brod sneered. "That's what all your lovers say."

And he charged, right shoulder first, his blade raised in his left hand. As he rammed into Khilli he smelled meat and blood and sweat and grease. As the man was knocked back, skidding on the icy rock underfoot, Brod brought his own blade

swinging down. But Khilli went with the skid, let himself fall and rolled, and Brod's blade slammed harmlessly on the ground. Khilli swept his own blade, and Brod had to jump to avoid his legs being taken out below the knees. But Khilli was on his feet even as Brod came down, and they closed again. Brod raised his blade, two-handed now, but Khilli raised his own fists to meet Brod's, over their heads.

Again they were still, locked together, face to face. The strange light was bright now, coming from above, whatever it was, and Brod stared into Khilli's eyes as they strained to bring the blades down. He could see Khilli's face clearly, every stitch-mark in that scar, every blackened pore on his cheeks. "By all that's holy," Brod said, "the Sim Designers made you ugly."

"Then let my ugly features be the last thing you see before I send you back to Memory." He spat in Brod's face, and lunged.

And Brod, his right arm weakening, could not resist him. He gave way. The two blades swept down and slammed against the ground, and both shattered. Khilli lowered his head and butted Brod in the mouth, and Brod felt teeth shatter. He staggered back, and a shove in the chest sent him flying to the ground.

Khilli straddled him, a dagger held up in both gloved hands. "Goodbye, rapist." He straightened up, tensing for the lunge.

And he convulsed, a look of shock on his face, his mouth wide, his eyes staring. He looked down at Brod, and blood spilled from his mouth. His hands loosened, and he dropped his knife harmlessly. Then he fell back like a toppling tree.

Elios stood motionless, a blood-stained dagger in his hand, a spatter of his son's ichor on his cloak. He considered the fallen Khilli, apparently without emotion. Then he turned to Brod. "You could not have won. He wore armor under his cloak. A coward's defense, really. But I have seen him dress and undress; I remembered the chinks, the gaps." He held up the knife, looked at its bloody blade, then dropped it to the ground beside Brod. It landed on the frozen rock with a bell-like chime.

Vala called. "Father! Is that you? Father—oh, Brod!"

Brod, fallen, cradling his hand, could not turn to see her. He tried to speak, but he spat blood and bits of broken tooth onto a ground that was bright beneath him—bright and sparkling with light, reflected from scraps of ice.

Vala ran up, her hood pulled back. As she took in the scene, the fallen Brod, her father, the corpse of Khilli, her face was wide with shock—and, just for a moment, Brod saw her brother in her, his face at the moment of his death, at the hands of his father. Then she fell to her knees and cradled Brod's head.

"Ow! Careful—my teeth."

"Sorry. Oh, and your hand! I must bandage it before you bleed out." She dug in a pocket and pulled out a scarf, and wrapped it around his hand. She seemed reluctant even to look at Khilli. "My brother—"

"He's dead," Brod said.

Elios, awkwardly, reached down and touched her shoulder. "It's over, my child. Many things will change now. Nothing will be the same . . ."

"You have that right, Speaker." Tripp came lumbering up, with Astiv in her wake. Tripp glanced around at the fallen Khilli, the wounded Brod, the blood-stained Elios. "Whatever happened here—oh! How limited, how petty we humans are, slaying each other in the light of *that*!" And she pointed up.

Brod glanced up, shading his eyes to see for the first time the brightening, pinkish-white light that bathed the scene. It was like the Star, he thought, or a scrap of it, somehow flung into the sky above the Antistellar. But since the Star was on the far side of the world, that, of course, was impossible. Wasn't it?

Vala stroked his brow. "Isn't it wonderful? And *we* did it, when we cleared away the Slime—or so Tripp thinks."

"There's a mirror," Tripp said. "A Substrate mirror, hanging in space. Orbiting up there, all these hundreds of millions of Great Years. Seen by Venus and Helen Gray, apparently, who spotted orbital architecture around this world—and it seems to have a twin in the sky over the Navel, perhaps a lens to deflect the light rather than to gather it. Controlled from this tower on the ground, it seems, by reflected starlight, in as simple a way as possible—the builders planned for the long term, planned for a system that would keep on working even if their own children forgot what it was! But they didn't plan for the Slime, which came after the uplift wars, and wiped out the builders' children, and covered over their grand mirrors, feeding on the very light that it was blocking out. And when the mirror in the sky turned away, the Slime itself died, but froze in place. And so things stayed, for uncounted millions of Great Years—until now."

"It will warm the world," Vala said, full of wonder. "Think of it, Brod! Tripp says the mirror gathers up the warmth of the Star and throws it back at this Darkside, and lights it up. Not all of it, not at once—"

"But enough to melt this ice cap, I'll wager," Tripp said, her face raised to the light in the sky. "Once it let life spread over this Darkside—the life we saw frozen, dead. Now the light comes again, enough to allow the green things to grow—and people to live here permanently on Darkside. It's as if we discovered a whole new planet."

Astiv grunted, skeptical. "Maybe. If so, it's thanks to the engineering of those Substrate builders, four hundred and fifty million Great Years dead. *We* haven't done anything to shout about."

Vala had seemed distracted, with the sudden presence of her father, Brod's injuries, the miraculous light in the sky. But now it was as if she remembered Khilli. She released Brod, and went to her brother's body. She touched his cheek with her fingers, as if wondering. "He came to save me, I suppose, as he saw it. And it's finished up like this." She looked up at her father. "But I won't go back with you, despite his sacrifice."

Elios had not moved. Now he stepped closer to Brod, and indicated the knife that still lay on the ground, out of Vala's sight. He murmured, "Pick it up, if you want. Let *her* think you killed him. It might be better that way. . . ."

"She's no fool. The truth will come out."

He sighed. "Yes. And I suppose I will have to deal with that. Especially if she is to become my successor, as Speaker—for in spite of her protestations, that is her fate now."

Brod stared. "You can think of such matters, at a time like this?"

"But that is what this has been about. The longer term. That is why I had to stop Khilli. He has changed our world, thanks to his campaign of conquest—united it, in a sense, under the Shuttle Flag. And now we have *this*, like a whole new world to conquer, as Tripp said. Who knows what wonders will follow?" He raised his face to the reflected sunlight. "But Khilli wished to replace me. He'd have destroyed me to do it, in the end—and destroyed the faith, and then the world. You are more like him than I am; you must understand how it would have been. So I had to deal with him—and this was my one chance, this one last moment of weakness as he made his dash for vengeance, when I had him alone, before he gathered his loyal troops around him once more."

"And you took that chance."

"I had no choice. Surely you see that . . ."

Brod heard Vala weeping softly. Tripp went to her.

Elios, his face raised, was murmuring softly.

"What are those words, Speaker?"

"A prayer to the Sim Controllers. A prayer for forgiveness." He closed his eyes, and the pinkish light bathed his face. ○

THE WALLS OF THE UNIVERSE

By Paul Melko

Tor, \$25.95 (hc)

ISBN: 978-0-7653-1997-5

Melko takes on a classic SF theme and gives it an up-to-date feel—as well as a fair number of very satisfactory twists.

The story, expanded from the *Asimov's* Readers' Award winning novella of the same name, is built around John Rayburn, an eighteen-year-old farm boy from Ohio, who has a more or less normal life at the point when the tale begins. He's a starter on the school basketball team, has a good record in school, is a bit shy around girls, and works hard on the family farm. He's just gotten in a bit of a scrape after beating up another kid in school, but he can probably get out of it without serious consequences. The victim, Ted Carson, is a known troublemaker, and an apology will probably smooth things over.

Then, in the midst of an argument with his parents over the apology, John stomps out of the house into the night and encounters—himself. John Prime (as the other John designates himself) introduces himself as a traveler from a parallel universe. He convinces John to hide him in the barn overnight.

Then, playing on John's natural curiosity, Prime talks him into trying the device that transfers him to another universe—and the ride is on. Prime says John can return home after twelve hours, the time it takes the battery to recharge. That, however, is a lie. John quickly discovers that the device only works in one "direction." He can move to a new universe with the push of a button, but he can't go back to any of those he's been in—most definitely not his own. Prime has stolen his home, his parents, his entire life.

Prime doesn't really want all the benefits of John's accomplishments. He has no idea of how to play basketball, no interest in apologizing to Carson's family, and no intention of going to college. His plan is simple: get rich quick by using ideas that have made huge amounts of money in other universes. (Stephen King novels and Rubik's Cube are two of them.) And while he's at it, he strikes up a relationship with Casey, a cheerleader whose analogue Prime has seduced in one universe after another—and whom John had longed for at a distance.

Melko splits the plot between the two Johns, as they find their way in worlds they aren't quite at home in. A reprise of Prime's journeys before finding John shows just how dangerous some of those worlds are: a North America where prehistoric mammals still roam, or others with oppressive governments.

John's travels end up in a world very close to his own, but where his parents are childless. He takes a job as their farmhand, and finds his way to college to study physics, hoping to find out how cross-universe travel can work—with the ultimate goal of returning home and evening the score with Prime—and getting his life back.

Both Johns run into complications. For one thing, Prime inherits John's troubles with Carson, whose father is foreman at the only place he can get a job. For another, it turns out to be a lot harder for an uneducated nobody to market his "inventions" than Prime expected: Writing a King novel involves a lot more than just remembering the plot of the movie.

Meanwhile, John finds himself sidetracked by a lucrative "invention"—pinball—that he hadn't planned on introducing to his world. In the process, he finds out there are other travelers be-

tween worlds—and they don't appreciate competition.

Melko brings the two plots to a highly satisfactory joint conclusion, with just enough new twists on the parallel-worlds plot to keep even long-time SF readers from figuring it all out. With its young protagonists and fast pace, this would be a great book to give to a high-schooler who's shown an interest in the genre.

THE CITY & THE CITY

by China Mieville

Del Rey, \$26.00 (hc)

ISBN: 978-0-345-4951-2

Mieville's latest is a police procedural of sorts, but it's got more in common with Jorge Luis Borges than with Ed McBain.

Tyador Borlu, the protagonist, is a police detective in the city of Beszel, capital of a society best described as Balkan in its general ambience. The story begins with the discovery of a murder victim, a young woman who appears at first to be a prostitute dumped in a park. As expected, the detective doesn't buy the surface explanation, and starts off on a trail of evidence that takes him much farther than he could have foreseen. In the process, the reader learns all about his world—which is considerably stranger than it first appears.

Shortly after the body is found, Borlu asks his assistant, a woman constable named Corwi, a question that the reader will only understand after gaining considerably more context: could this be an instance of "breach"? Corwi rejects the hypothesis, on the grounds that the area where the body was found is "almost total," and there is no nearby "cross-hatching." Exactly what these terms mean will only become clear over several chapters.

What emerges is that Beszel is in an odd relationship with the rival city of Ul Qoma, where even the language is different. Traffic between the two is as rigidly controlled as between the two halves of Berlin during the Cold War. As the novel

progresses, we learn that the two cities have different status in the international community—Beszel, for example, is not on good terms with the United States, whereas Ul Qoma is. This favorable relationship with the U.S. gives Ul Qoma considerable financial advantages over its rival city. So when it turns out that Borlu's murder victim is an American student at a university in Ul Qoma, the case takes on far more serious implications.

Ultimately, the chase requires Borlu to travel to Ul Qoma and work with the police in that city. An outsider whom the local cops automatically close ranks against, he decides to push the investigation on his own—to the annoyance of his Ul Qoman contact, another veteran detective who's willing to bend a few rules to get to the bottom of things. After poking around at the university—and at the archaeological dig where the victim had been working—they learn that the murdered student had been involved in political conspiracies that revolved around the two cities and their joint-yet-separate histories. One of the victim's faculty advisors and a fellow grad student are also involved, and Borlu decides that saving them (and solving the case) requires smuggling them back to Beszel.

Of course, things go badly awry just as Borlu thinks he's pulled off his plan. At that point, the complexities of the connection between the two cities jump to another level, and the truly bizarre relation between them becomes fully evident.

Mieville takes an apparently impossible premise and turns it into a virtuoso examination of perception and reality, with a paranoid energy worthy of Philip K. Dick. Without any overt fantastic or futuristic element, the book is probably most easily categorized as an alternate reality. But its gritty use of everyday detail and its tough, cynical protagonist make it easy to accept as a realistic portrayal of a society that in many ways makes sense. If you haven't tried Mieville before—and even if his other fiction hasn't

grabbed your interest—give this one a try.

Powerful—and convincing—work from a writer who's being touted as one of the hottest in the business.

THE EMPRESS OF MARS

by Kage Baker

Tor, \$25.95 (hc)

ISBN: 978-0-7653-1890-9

Baker's latest is another novel that comes from an *Asimov's* novella. It takes place during the frontier days of a Martian colony, and most of the action is set in the only bar on the planet—after which the book is named.

In this future, Mars is a British colony—settled and administered by the British Arean Company, on the model of the British East India Company. Not surprisingly, the British Martian enterprise has many of the flaws and quirks of its terrestrial predecessor. The administrators are short-sighted, often incompetent, and far more interested in the quarterly profit than in the long-range health of the colony or its economy. Not surprisingly, the terraforming of the planet is in a decidedly rudimentary state.

Mary Griffith, who immigrated to Mars with her three daughters, is the founder and proprietress of the Empress, serving beer and whiskey brewed from the local grain. A Celtic clan that has emigrated to the planet provides both the grain and a significant quota of her customers. So when the head of Clan Morrigan tells her that the settler who raises the only barley on the planet has been chosen to return to Earth to look after the clan's affairs, it falls to Mary to buy the land or see it revert to the Arean Company—which she knows would plow under the barley crop just to put her out of business. That puts her in a tight spot, because she barely has the cash to keep her own operation going.

Luckily, Mary finds allies—a motley crew, but that's what you get on a frontier world. They include a con man who figures out that Mars is going to require

newer and bigger schemes; the ne'er-do-well son of an Italian business magnate, who thinks of Mars as a Western movie; the genius son of the Morrigan headman, who's invented robot bees. Her enemies are an equally odd lot, including a group of priestesses from Luna who decide she's a heretic, and the head of the Arean Company, who wants to keep the planet under his thumb. Baker draws them all with a rich sense of humor, and piles one outrageous surprise on another as she generates a rip-snorter of an action plot.

The book is full of delicious twists on familiar tropes, witty bits of dialogue, and hard-SF extrapolation worthy of the masters. Between this novel and her outstanding 2008 fantasy, *The House of Stag*, Baker has put herself well up on my list of authors to keep an eye on.

LAVINIA

by Ursula K. Le Guin

Harcourt, \$24.00 (hc)

ISBN: 978-0-15-101424-8

Taking a secondary character of the *Aeneid*, the Italian woman whom Aeneas marries, Le Guin gives us a new look at one of the key epics of European civilization.

Le Guin's focus is on the pre-Roman society of which her protagonist is a member, and on the changes spurred by the arrival of the Trojan exiles led by Aeneas. And while the larger shape of her plot is dictated by Virgil's epic, she finds plenty of room for invention.

The story begins by filling in the bare outlines of the world Lavinia inhabits. The daughter of King Latinus, she is in a privileged position to see the whole sweep of her society. At the same time, she is under considerable constraints. As a marriageable young woman, her course is clearly determined: she will marry a prince and cement an alliance with one of the other tribes inhabiting the land around the mouth of the Tiber. Her mother is determined that she marry Turnus, the warlike king of the neighboring Rutulians. Turnus is handsome

and ambitious; but Lavinia has her doubts.

As we learn early on, Lavinia, as the only child of her father, has long assisted him in the rituals that constitute a central part of a king's role. And in so doing, she has had an unsettling encounter that she can only understand as a prophecy of her own future. A poet—whom the reader will recognize as Virgil himself—appears to her and tells her that she is destined to marry a foreigner. After hearing the basic outline of the *Aeneid*, Lavinia is determined to follow the path her poet has outlined. The rest of the book shows her doing so, even as she is appalled to see the birth throes of a new world tearing apart the one she has grown up in.

Le Guin tells the story with subtle touches, building from domestic scenes to violent battles, with a large cast of well-drawn characters. The *Aeneid* was once among the essential texts of European literature; the decline of Latin is probably the main reason for its current state of neglect. One consequence of that is that material that would have been richly evocative to an earlier generation of readers is likely to be uncharted ground to many moderns.

Still, Le Guin's recasting of one of Virgil's story lines, with glimpses at the others, is clear enough to give a hint, at least, of the mythical richness on which she is drawing. The power of the original comes through—although it takes on a very different cast when shown through the eyes of a character whom the old Roman saw as a distinctly minor part in his tale of the birth of an empire.

Anything by Le Guin is a treat, but when several of her strengths combine, the result is something special.

SHADOW MAGIC

By Jaida Jones & Danielle Bennett

Signet, \$25.00 (hc)

ISBN: 978-0-553-80697-7

The sequel to the authors' debut novel, *Havemercy*, is set in Ke-Han, a society analogous to China. A peace conference is underway to negotiate terms between

Ke-Han and Volstov, the Russia-like society that was the setting of the previous book.

The action is seen through the eyes of four characters. Prince Mamoru, younger son of the Ke-Han emperor, and his servant Koujie are set against two members of the delegation from Volstov, General Alcibiades and the magician Caius Greylace. As the novel begins, the old emperor has just committed suicide to atone for losing the war, and Mamoru's older brother has taken the throne. This happens just as the Volstovan delegation arrives.

The four point of view characters are a study in contrasts, allowing a wide view of the world they inhabit. Alcibiades is a stereotypical military man, brusque and unsophisticated. Caius is a bit of a butterfly, preoccupied with style and decorum. Mamoru is a creature of the imperial court, with little down-to-earth knowledge of his nation beyond what he saw in a brief participation in the war. Koujie is his practical, fiercely loyal right hand man, rigidly traditional in his adherence to the norms of Ke-Han society.

The death of the old emperor is just the first in a series of waves that crashes over the peace conference. Shortly after the formal dinner that initiates the conference, the new emperor declares his brother a traitor, and sends men to kill him. Koujie overhears this, and he and Mamoru hastily flee the capital—with the prince disguised as a woman. Meanwhile, the foreign diplomats find themselves trying to make sense of a society whose rules are utterly different from what they have come to expect; Alcibiades, in particular, finds the Ke-Han incomprehensible. The food is awful, the language impenetrable, and the manners infuriating.

More to the point, he also finds Caius incomprehensible—and irritating to the point of madness. Caius, meanwhile, makes Alcibiades his project, trying to dress him in appropriate colors and introduce him to more sophisticated ways

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of life. Things don't click between them till they're on a trip out to the city, where Alcibiades discovers peasant food, and they get a look at the satiric popular theater of the city.

Koujie and Mamoru, meanwhile, flee the capital and find themselves in a world that the prince has never even imagined. Disguised as a woman, he is exposed to the harsh realities of gender difference in peasant society. The fugitives find that internal border guard-posts have been alerted to watch for them, and cast their lots with various

groups of travelers—including a troupe of itinerant actors—to ease their way through inspections. In the process, the previous relations between master and servant have to be jettisoned, with traumatic consequences for both men.

Eventually, the plot brings together the four protagonists in common cause. This one feels a bit slower getting started than the previous novel by Jones and Bennett, but the play of characters and the clash of well-drawn exotic societies works to make this an even stronger novel in the end. Highly recommended. ○

SF CONVENTIONAL CALENDAR

It's convention month in Canada—six of them this time—and over the Falls for EerieCon. I'll be at RavenCon. Plan now for social weekends with your favorite SF authors, editors, artists, and fellow fans. For an explanation of con(vention)s, a sample of SF folksongs, and info on fanzines and clubs, send me an SASE (self-addressed, stamped #10 [business] envelope) at 10 Hill #22-L, Newark NJ 07102. The hot line is (973) 242-5999. If a machine answers (with a list of the week's cons), leave a message and I'll call back on my nickel. When writing cons, send an SASE. For free listings, tell me of your con 5 months out. Look for me at cons behind the Filthy Pierre badge, playing a musical keyboard.—Erwin S. Strauss

APRIL 2010

- 17—**RavenCon**. For info, write: 3502 Fernmoss Ct., Charlotte NC 28269. Or phone: (973) 242-5999 (10 AM to 10 PM, not collect). (Web) ravencon.com. (E-mail) info@raven.com. Con will be held in: Richmond VA (if city omitted, same as in address) at the Holiday Inn Koger Center. Guests will include: Writer Rachel Caine, artist R. Cat, gamer Steve Long.
- 9-11—**Ad Astra**. ad-astra.org. Toronto ON. Todd McCaffrey, Eric Flint, R.J. Sawyer, A. Allston. Horror, SF and fantasy.
- 9-11—**FILKONtario**. filkontario.ca. Mississauga (Toronto) ON. J. & M. Bonhoff, E. Neely, Wm. M. Simmons. SF folksinging.
- 9-11—**SteamPosium**. rose-society.org. St. Louis MO. Sponsored by the Royal Order of Steampunk Enthusiasts (ROSE).
- 10-11—**HalCon**. hal-con.net. Omiya City, Saitama Prefecture (near Tokyo). "The first Western-style con in Japan."
- 16-18—**Odyssey 2010**. oddcon.com. Radisson, Madison WI. Harry Turtledove, Tobias Buckell, Monte Cook. SF/fantasy.
- 16-18—**KawaiiCon**. kawaii-con.com. info@kawaii-con.com. Ala Moana Hotel, Honolulu HI. Anime.
- 16-18—**Sci Fi on the Rock**. scifiontherock.com. Holiday Inn, St. Johns NB. Casey Biggs, Tony Amendola, Nalini Krishan.
- 16-18—**TMode**. tmode.org. info@tmode.org. Hilton, Alexandria VA (near Washington DC). Anime and gaming.
- 16-18—**PortmeirCon**. slxofone.co.uk. Portmeirion UK. For fans of the TV show "The Prisoner," where it was filmed.
- 16-19—**Official Leonard Nimoy Fan Con**. theofficialleonardnimoyfanclub.com. Falstaff Hotel, Warwickshire UK.
- 23-25—**ConEstoga**, Box 700776, Tulsa OK 74170. scifitulsa.com. Radisson. Stirling, Eggleton, L. Bishop, T.S. Taylor.
- 23-25—**EerieCon**, Box 412, Buffalo NY 14226. eeriecon.org. Days Inn at the Falls, Niagara Falls NY. K. Anderson, Moesta.
- 23-25—**Anime Detour**, c/o Box 23700, Richfield MN 55423. animedetour.com. Sheraton, Bloomington (Minneapolis) MN.
- 25—**Otaku Fest**, Box 2392, Ellicott City MD 21018. otaku-fest.webs.com. Centennial High School.
- 30-May 2—**EatonCon**, c/o Conway, UCR Libraries, Box 5900, Riverside CA 92517. eaton-collection.ucr.edu. U. of Cal.
- 30-May 2—**PenguiCon**, Box 40426, Redford MI 48240. penguicon.org. Marriott, Troy (Detroit) MI. Open software and SF.
- 30-May 2—**Boréal**, 69 ave. Ruel, Montmorency QC G1C 2E2. congresboreal.ca. Québec QC. French-language SF.
- 30-May 2—**Texas Nightmare Weekend**. texasfrightmareweekend.com. Irving (Dallas area) TX. Horror and media.
- 30-May 2—**OutLantaCon**, 2582 Addlson Dr., Doraville GA 30340. outlantacon.org. Atlanta GA. GLBT SF and gaming.
- 30-May 2—**NoBrandCon**, Box 1892, Eau Claire WI 54703. (715) 598-9215. nobrandcon.com. Ramada. Anime.
- 30-May 2—**Middle Tennessee Anime Con**, Box 40941, Nashville TN 37204. animenashville.com. Sheraton Music City.
- 30-May 2—**Malice Domestic**, Box 8007, Gaithersburg MD 20898. malicedomestic.org. Washington DC area. Mysteries.

MAY 2010

- 7-9—**Nebula Awards Weekend**. sfwa.org. Hard Rock, Hollywood (Miami) FL. SF/fantasy Writers of America annual meet.
- 7-9—**CostumeCon**, Box 1637, Milwaukee WI 53201. cc28.org. Annual event celebrating costuming in all its forms.
- 14-16—**LepreCon**, Box 26665, Tempe AZ 85285. leprecon.org. Marriott, Mesa (Phoenix) AZ. C. Vess, G.R.R. Martin.
- 14-16—**KeyCon**, Box 3178, Winnipeg MB R3C 4E6. keycon.org. Radisson Downtown. Emphasis on literary SF and fantasy.

AUGUST 2010

- 5-8—**ReConStruction**, Box 31706, Raleigh NC 27612. reconstructionsf.org. The North American SF Convention. \$110.

SEPTEMBER 2010

- 2-6—**Aussiecon 4**, GPO Box 1212, Melbourne VIC 3001, Australia. aussiecon4.org.au. World SF Convention. US\$225.

AUGUST 2011

- 17-21—**RenoVation**, Box 13278, Portland OR 97213. rcfi.org. Reno NV. Asher, Brown, Powers, Vallejo. WorldCon. \$140.

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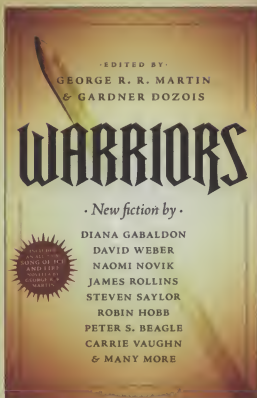
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